Empowering people through automation



core products CATALOG

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Industrial Automation

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Omron Automation is an industrial automation partner that creates, sells, and services complete automation solutions that include sensing, control, safety, vision, motion, robotics and more.

Established in 1933, Omron's 30,000 employees help businesses solve problems with creativity in more than 110 countries. Our flexible, customizable solutions successfully tackle challenges across industries, whether these be a need for high-performance machines in food and beverage packaging or plant-wide traceability in automotive manufacturing.

As a total solutions provider, we carry a rich and diverse portfolio of automation technologies and services. From sensors, barcode readers, and control panel components to vision systems, collaborative and mobile robots, and programmable logic controllers, our offering can be used to solve nearly any application in any industry. We also offer related product services such as training and maintenance support for Omron technologies as well as professional services for when you need industry expertise.

To help you navigate our wide-ranging portfolio and home in on the specific products needed for your application, we have developed this core product guide that presents our most popular technologies and services in a clear and concise format.

Learn more >





OMRON

Our Mission: To improve lives and contribue to a better society

90+1 350

5.9

Years automation experience

Offices in 117 countries

Billion USD annual sales



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E2E Next - Long Range DC 3 Wire Inductive Sensors

- Industry leading sensing distances with up to 4x the sensing range of standard models
- IO-Link is standard with DC 3-wire PNP models Multiple connection Types
- Multiple connection Types (including M8 QD, M12 QD, M12 Pig-tail QD, PVC cable and PVC Robot Cable)
- Harsh condition robustness with IP67, IP69K, and IP67G







Barrel Size	Sensing Distance	Shielded /Unshielded	Connection Method	PNP Model	NPN Model
	1.5 mm		M9 Connector	E2E-X1R5B1D8-M5	E2E-X1R5C18-M5
	2mm		(3 pins)	E2E-X2B1D8-M5	E2E-X2C18-M5
	4mm	Shielded		E2E-X4B1D8-M5	E2E-X4C18-M5
	1.5 mm	Shleided		E2E-X1R5B1D8-M1TJ 0.3M	E2E-X1R5C18-M1TJ 0.3M
	2mm		M12 Pigtail*	E2E-X2B1D8-M1TJ 0.3M	E2E-X2C18-M1TJ 0.3M
M8	4mm			E2E-X4B1D8-M1TJ 0.3M	E2E-X4C18-M1TJ 0.3M
	2 mm		MQ Campastan	E2E-X2MB1D8-M5	E2E-X2MC18-M5
	4mm			E2E-X4MB1D8-M5	E2E-X4MC18-M5
	8mm	I localista I de al	(3 pins)	E2E-X8MB1D8-M5	E2E-X8MC18-M5
	2 mm	Unshielded		E2E-X2MB1D8-M1TJ 0.3M	E2E-X2MC18-M1TJ 0.3M
	4mm		M12 Pigtail*	E2E-X4MB1D8-M1TJ 0.3M	E2E-X4MC18-M1TJ 0.3M
	8mm			E2E-X8MB1D8-M1TJ 0.3M	E2E-X8MC18-M1TJ 0.3M
	2 mm		M8 Connector (3 pins) E2 M12 Pigtail* E2 M8 Connector (3 pins) E2 M12 Pigtail* E2 M12 Pigtail* E2 E2 M12 Pigtail* E2 E2 M12 Pigtail* E2 E2 E2 E2 E2 E2 E2 E2 E2 E2	E2E-X2B1D12-M1	E2E-X2C112-M1
	4mm	Shielded		E2E-X4B1D12-M1	E2E-X4C112-M1
M12	9mm			E2E-X9B1D12-M1	E2E-X9C112-M1
	5 mm			E2E-X5MB1D12-M1	E2E-X5MC112-M1
	2 mm 4mm 9mm 5 mm 16mm 5 mm	Unshielded		E2E-X8MB1D12-M1	E2E-X8MC112-M1
	16mm			E2E-X16MB1D12-M1	E2E-X16MC112-M1
	5 mm			E2E-X5B1D18-M1	E2E-X5C118-M1
	8mm	Shielded		E2E-X8B1D18-M1	E2E-X8C118-M1
M18	14mm		M12 Connector	E2E-X14B1D18-M1	E2E-X14C118-M1
MIS	10 mm		(4 pins)	E2E-X10MB1D18-M1	E2E-X10MC118-M1
	16mm	Unshielded		E2E-X16MB1D18-M1	E2E-X16MC118-M1
	30mm			E2E-X30MB1DL18-M1	E2E-X30MC1L18-M1
	10 mm			E2E-X10B1D30-M1	E2E-X10C130-M1
	15mm	Shielded		E2E-X15B1D30-M1	E2E-X15C130-M1
M30	23mm			E2E-X23B1D30-M1	E2E-X23C130-M1
M30	18 mm			E2E-X18MB1D30-M1	E2E-X18MC130-M1
	30mm	Unshielded		E2E-X30MB1DL30-M1	E2E-X30MC1L30-M1
	50mm			E2E-X50MB1DL30-M1	E2E-X50MC1L30-M1

Note: Models shown are normally open, normally closed options are available.

^{* 0.3}M pre-wired with 4 pin M12 connector on the end.



E2EW-

Metal Face Proximity Sensors

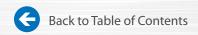
- Extended sensing range, models from 1x to 4x standard sensing range
- Factor 1 sensing of ferrous and non-ferrous metals
- Weld field immunity
- IP67 rating for environmental robustness
- Proprietary slag resistance coating
- IO-link configurability and output monitoring







OC 3-Wire Standard	d Metal Body				
Connection	Sensing Range	Size	Sensing Distance	PNP	NPN
		M12	7 mm	E2EW-X7B1T12-M1TJ 0.3M	E2EW-X7C112-M1TJ 0.3M
M12 pigtail*		M18	12 mm	E2EW-X12B1T18-M1TJ 0.3M	E2EW-X12C118-M1TJ 0.3M
	434	M30	22 mm	E2EW-X22B1T30-M1TJ 0.3M	E2EW-X22C130-M1TJ 0.3M
	4X	M12	7 mm	E2EW-X7B1T12 2M	E2EW-X7C112 2M
2m Cable		M18	12 mm	E2EW-X12B1T18 2M	E2EW-X12C118 2M
		M30	22 mm	E2EW-X22B1T30 2M	E2EW-X22C130 2M
DC 3-Wire Metal Bo	ody with Spatter Resis	tant Coating			
Connection	Sensing Range	Size	Sensing Distance	PNP	NPN
		M12	7 mm	E2EW-QX7B1T12-M1TJ 0.3M	E2EW-QX7C112-M1TJ 0.3M
M12 pigtail*		M18	12 mm	E2EW-QX12B1T18-M1TJ 0.3M	E2EW-QX12C118-M1TJ 0.3M
	4X	M30	22 mm	E2EW-QX22B1T30-M1TJ 0.3M	E2EW-QX22C130-M1TJ 0.3M
	48	M12	7 mm	E2EW-QX7B1T12-M1	E2EW-QX7C112-M1
M12 4pin		M18	12 mm	E2EW-QX12B1T18-M1	E2EW-QX12C118-M1
		M30	22 mm	E2EW-QX22B1T30-M1	E2EW-QX22C130-M1
M12 Pigtail		M12	3 mm	E2EW-QX3D112-M1TGJ 0.3M	_
M12 Pigtail		M18	7 mm	E2EW-QX7D118-M1TGJ 0.3M	_
M12 Pigtail	2	M30	12 mm	E2EW-QX12D130-M1TGJ 0.3M	_
2m Cable	2x	M12	3 mm	E2EW-QX3D112 2M	E2EW-QX3D212 2M
2m Cable		M18	7 mm	E2EW-QX7D118 2M	E2EW-QX7D218 2M
2m Cable		M30	12 mm	E2EW-QX12D130 2M	E2EW-QX12D230 2M
DC 2-Wire Standard	d Metal Body				
Connection	Sensing Range	Size	Sensing Distance	PNP	NPN
M12 Pigtail		M12	3 mm	E2EW-X3D112-M1TGJ 0.3M	_
M12 Pigtail		M18	7 mm	E2EW-X7D118-M1TGJ 0.3M	_
M12 Pigtail	21/	M30	12 mm	E2EW-X12D130-M1TGJ 0.3M	_
2m Cable	2x	M12	3 mm	E2EW-X3D112 2M	E2EW-X3D212 2M
2m Cable		M18	7 mm	E2EW-X7D118 2M	E2EW-X7D218 2M
2m Cable		M30	12 mm	E2EW-X12D130 2M	E2EW-X12D230 2M



E3Z - Compact Photoelectric Sensor

- General purpose photoelectric family with all common sensing modes at long range
- Minimal optical axis deviation for easy alignment
- IP67 for water resistance
- Intensive shielding for highest noise immunity (EMC)
- Multiple molding housing for high mechanical resistance





Sensor Type	Sensor Distance	Connection	PNP Model	NPN Model
	10m (Red LED)	2m Cable	E3Z-T81A	E3Z-T61A
	Tom (Red LED)	M8 Connector (4 pins)	E3Z-T86A	E3Z-T66A
Through-beam	15 mg / landra va d 1 50)	2m Cable	E3Z-T81	E3Z-T61
(emitter+receiver)	15m (Infrared LED)	M8 Connector (4 pins)	E3Z-T86	E3Z-T66
	30m (Infrared LED)	2m Cable	E3Z-T82 2M	E3Z-T62 2M
		M8 Connector (4 pins)	E3Z-T87	E3Z-T67
Retro-reflective with MSR	0.1. 4 (D. 1150)	2m Cable	E3Z-R81	E3Z-R61
function	0.1 to 4m (Red LED)	2m Cable E3Z-T81A M8 Connector (4 pins) E3Z-T86A 2m Cable E3Z-T81 M8 Connector (4 pins) E3Z-T86 2m Cable E3Z-T82 2M M8 Connector (4 pins) E3Z-T87 2m Cable E3Z-R81 M8 Connector (4 pins) E3Z-R86 2m Cable E3Z-D82 M8 Connector (4 pins) E3Z-D87 2m Cable E3Z-LS81	E3Z-R86	E3Z-R66
Diffuse reflective	1 no (Infrared IFD)	2m Cable	E3Z-D82	E3Z-D62
Diffuse-reflective	1m (Infrared LED)	M8 Connector (4 pins)	E3Z-D87	E3Z-D67
De demondent and a second	20 to 200 mm (Park LED)	2m Cable	E3Z-LS81	E3Z-LS61
Background suppression	20 to 200mm (Red LED)	M8 Connector (4 pins)	E3Z-LS86	E3Z-LS66

Note:

For sensors with IO-Link, refer to the catalog on the website automation.omron.com



E3FA - M18 Barrel Photoelectric Sensor

- Simplicity in selection and installation
- Compact size with flush mounting option
- IP67, IP69K for wash down resistance
- Straight or right angle (E3RA) models in cylindrical M18 plastic housing
- Background suppression, Limited Distance and Transparent detection models available





Sensor Type	Sensor Distance	Connection	PNP Model	NPN Model
Through-beam (emitter +	20m (Dad LED)	2m Cable	E3FA-TP11 2M	E3FA-TN11 2M
receiver)*	20m (Red LED)	M12 Connector (4 pins)	E3FA-TP21	E3FA-TN21
Retro-reflective with MSR	0.1 to 4m (Dod LED)	2m Cable	E3FA-RP11 2M	E3FA-RN11 2M
function	0.1 to 4m (Red LED)	M12 Connector (4 pins)	E3FA-RP21	E3FA-RN21
	100 (D ED)	2m Cable	E3FA-DP11 2M	E3FA-DN11 2M
	100mm (Red LED)	M12 Connector (4 pins)	E3FA-DP21	E3FA-DN21
Diffuse-reflective*	300mm (Red LED)	2m Cable	E3FA-DP12 2M	E3FA-DN12 2M
Diffuse-reflective"		M12 Connector (4 pins)	E3FA-DP22	E3FA-DN22
	1 (D - d ED)	2m Cable	E3FA-DP13 2M	E3FA-DN13 2M
	1m (Red LED)	M12 Connector (4 pins)	E3FA-DP23	E3FA-DN23
	100 (D ED)	2m Cable	E3FA-LP11 2M	E3FA-LN11 2M
De alcanación de como estados	100mm (Red LED)	M12 Connector (4 pins)	E3FA-LP21	E3FA-LN21
Background suppression	200mm (Dad LED)	2m Cable	E3FA-LP12 2M	E3FA-LN12 2M
	200mm (Red LED)	M12 Connector (4 pins)	E3FA-LP22	E3FA-LN22

^{*}Note for these sensing modes Infrared LED models are available.



E3Z-F -

M18 Barrel Mount Photoelectric Sensor

- Visible alignment spot simplifies set-up
- Popular M18 nose mounting
- Models with infrared LEDs available
- Offers various types of sensing distances





Sensor Type	Sensor Distance	Connection	PNP Model	NPN Model
Through-beam	20 m	2m Cable	E3Z-FTP11 2M	E3Z-FTN11 2M
(emitter+receiver)*	20111	M12 Connector (4 pins)	E3Z-FTP21	E3Z-FTN21
Retro-reflective with MSR	0.1 40.4 400	2m Cable	E3Z-FRP11 2M	E3Z-FRN11 2M
Function	0.1 to 4m	M12 Connector (4 pins)	E3Z-FRP21	E3Z-FRN21
	100 mm	2m Cable	E3Z-FDP11 2M	E3Z-FDN11 2M
		M12 Connector (4 pins)	E3Z-FDP21	E3Z-FDN21
	300 mm	2m Cable	E3Z-FDP12 2M	E3Z-FDN12 2M
Difference de artico		M12 Connector (4 pins)	E3Z-FDP22	E3Z-FDN22
Diffuse-reflective*	500	2m Cable	E3Z-FDP13 2M	E3Z-FDN13 2M
	500 mm	M12 Connector (4 pins)	E3Z-FDP23	E3Z-FDN23
	1	2m Cable	E3Z-FDP14 2M	E3Z-FDN14 2M
	1 m	M12 Connector (4 pins)	E3Z-FDP24	E3Z-FDN24

Note:

Reflectors for retroreflective models are sold separately under code E39-R1S *Note for these sensing modes Infrared LED models are available



E3AS-HL - Photoelectric Sensor

- Limited effect of color or reflectivity
- Small and complex object detection
- Line and spot beam for 150mm and 500mm sensing distances
- IP69K and IP67G
- Ecolab tested and certified detergent resistance
- Advanced ease-of-use, single teach button, OLED screen
- IO-Link distance output monitoring and configuration







Sensor Type	Sensor Distance	Beam Type	Connection	PNP Model (I/O Link)	NPN Model
	500 mm	Spot		E3AS-HL500MT-M1TJ 0.3M	E3AS-HL500MN-M1TJ 0.3M
	500 mm	Line	Pre-wire M12 Connector	E3AS-HL500LMT-M1TJ 0.3M	E3AS-HL500LMN-M1TJ 0.3M
	150 mm	Spot		E3AS-HL150MT-M1TJ 0.3M	E3AS-HL150MN-M1TJ 0.3M
CMOS laser	150 mm	Line		E3AS-HL150LMT-M1TJ 0.3M	E3AS-HL150LMN-M1TJ 0.3M
CMOS laser	500 mm	Spot	- M8 4pin	E3AS-HL500MT M3	E3AS-HL500MN M3
	500 mm	Line		E3AS-HL500LMT M3	E3AS-HL500LMN M3
	150	Spot		E3AS-HL150MT M3	E3AS-HL150MN M3
	150 mm	Line		E3AS-HL150LMT M3	E3AS-HL150LMN M3

E3AS-F - Photoelectric Sensor

- Minimal color influence on sensing distance
- 50mm to 1500mm sensing range
- IP69K and IP67G
- Ecolab tested and certified detergent resistance
- Single teach button
- IO-Link distance output monitoring and configuration





Sensor Type	Sensor Distance	Material	Connection	PNP Model (I/O Link)	NPN Model
		6. 1 1 6. 1	Pre-wired M12 Connector	E3AS-F1500IMT-M1TJ 0.3M	E3AS-F1500IMN-M1TJ 0.3M
	50, 1500 22.22	Stainless Steel	M8 4pin Connector	E3AS-F1500IMT M3	E3AS-F1500IMN M3
	50 - 1500 mm	Plastic	Pre-wired M12 Connector	E3AS-F1500IPT- M1TJ 0.3M	E3AS-F1500IPN-M1TJ 0.3M
Time of Flight			M8 4pin Connector	E3AS-F1500IPT M3	E3AS-F1500IPN M3
with Background Suppression	50 - 1000 mm	Stainless Steel	Pre-wired M12 Connector	E3AS-F1000IMT-M1TJ 0.3M	E3AS-F1000IMN-M1TJ 0.3M
			M8 4pin Connector	E3AS-F1000IMT M3	E3AS-F1000IMN M3
		Plastic	Pre-wired M12 Connector	E3AS-F1000IPT-M1TJ 0.3M	E3AS-F1000IPN-M1TJ 0.3M
			M8 4pin Connector	E3AS-F1000IPT M3	E3AS-F1000IPN M3





E3AS-L - Photoelectric Sensor

- Enhanced background suppression-Reduced black/white error and differential travel
- 200mm or 80mm sensing range
- IP69K and IP67G
- Ecolab tested and certified detergent resistance
- Single teach button
- IO-Link configurability





Sensor Type	Sensor Distance	Material	Connection	PNP Model (I/O Link)	NPN Model
Diffuse with Background Suppression	10 - 200 mm	Stainless Steel	Pre-wired M12	E3AS-L200MT-M1TJ 0.3M	E3AS-L200MN-M1TJ 0.3M
	10 - 80 mm		Connector	E3AS-L80MT-M1TJ 0.3M	E3AS-L80MN-M1TJ 0.3M
	10 - 200 mm		M8 4pin Connector	E3AS-L200MT M3	E3AS-L200MN M3
	10 - 80 mm			E3AS-L80MT M3	E3AS-L80MN M3

E3S-DC - Color Mark Detection Sensor

- High signal to noise ratio detects subtle color differences.
- High luminance, three-element (RGB) LED light source for greater light intensity.
- Highly efficient optics technology provides high power and enables stable detection even of subtle color differences.





Туре	Sensor Distance	Connection	Output	Baud Rate (IO-Link)	Model
Diffuse - reflective (mark detection)	10 ± 3mm	M12 Connector	PNP	COM 3 (230, 4 kbps)	E3S-DCP21-IL3
			NPN		E3S-DCN21



E3NX-FA - High Speed Digital Fiber Amplifier

- Easy teaching by Smart tuning within a few seconds
- New N-Smart technology provides significant improvement for sensing distance, minimum object detection and speed
- Easy and transparent information about sensor status by Solution Viewer and Change Finder function
- EtherCAT Communication unit for high-speed field bus connectivity





Setting/Function	Sensor Distance	Inputs/Outputs	Connection	PNP Model	NPN Model
Standard Models	Sensing distance up to 4m depending on	1 output	2 m	E3NX-FA41 2M	E3NX-FA11 2M
Advanced Models			2 m	E3NX-FA51 2M	E3NX-FA21 2M
Analog Output Models	fiber used	2 outputs	2 m	E3NX-FA41AN 2M	E3NX-FA11AN 2M

Note: Infrared standard models are available as well as connector options for standard, advanced, and infrared models.

E3X-HD - Advanced Fiber Amplifier

- Simple one-button smart tuning for sensor threshold and light intensity
- Confirm settings and status easily with dual digital display
- Automatic compensation for large objects and low reflectance dark targets





Setting / Function	Range	Connection	PNP Model	NPN Model
Advanced digital amplifier	Line to Anne demonstration on Chevrone del	2m Cable	E3X-HD41 2M	E3X-HD11 2M
		M8 Connector	E3X-HD44	E3X-HD14



E3X-NA / SD -Fiber Optic Amplifiers

- Easy adjustment with potentiometer
- Mutual interference prevention
- Enhanced water resistance types





Setting / Function	Distance	Connection	PNP Model	NPN Model
Potentiometer and Bargraph	Depending on the	3 Calala	E3X-NA41	E3X-NA11
Teach Button and digital display	fiber optic model	2m Cable	E3X-SD51	E3X-SD21

E3NX-CA -Colormark Fiber Amplifier

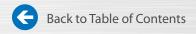
- High signal to noise ratio makes subtle color difference detection easy
- Able to handle glossy materials
- Stable even when lots change





Model	Sensor Distance	Connection	Inputs / Outputs	PNP Model	NPN Model
Standard Model	Sensor distance depends on selected fiber model	2m Cable	1 output	E3NX-CA41 2M	E3NX-CA11 2M
Advanced Model			2 outputs / 1 input	E3NX-CA51 2M	E3NX-CA21 2M

^{*}For fiber options, or models for special applications, refer to the E32 fibers catalog on the Omron website.



E3ZM-V-

Colormark Detection Sensor

- Compact SUS 316L colormark photoelelctric sensor
- Ideal for high contrast colormark detection in a small package
- IP69K and IP67 rated for environmental robustness
- 50 us response time
- Single teach button





Туре	Sensor Distance	Connection	PNP	NPN
Diffuse - reflective (color mark detection)	12 ± 2mm	Pre-wired	E3ZM-V81 2M	E3ZM-V61 2M
		M8 Connector	E3ZM-V86	E3ZM-V66

Notes: Additional model numbers with different cable lengths, connections and options are available. Tables include representative part numbers. Please consult the product page for more details.



ZW Confocal Displacement - Measurement Sensors

- Static Resolution of 0.25 μm
- EtherCAT, EtherNet/IP, EtherNet TCP/UDP, and Serial RS-232C Network communications included
- Analog and Discrete I/O for measurement and functions
- Stable measurements for any material including glass and mirror-like surfaces
- Simple programming with Sysmac Studio software
- Compact sensor heads with no electronic parts electrical noise immune and does not generate heat





Measuring Range	Spot Diameter	Cable Length	Controller	Sensor Head
10 ± 0.5 mm	4 μm	2 m		ZW-S8010 2M
20 ± 1 mm	7 μm	2 m	ZW-8000T	ZW-S8020 2M
30 ± 2 mm	10 μm	2 m		ZW-S8030 2M
10 ± 0.5 mm	50 μm	2 m		ZW-S7010 2M
20 ± 1 mm	70 μm	2 m	ZW-7000T	ZW-S7020 2M
30 ± 2 mm	100 μm	2 m		ZW-S7030 2M
40 ± 3 mm	120 μm	2 m		ZW-S7040 2M
10 ± 0.5 mm	9 μm	2 m		ZW-S5010 2M
20 ± 1 mm	13 μm	2 m	ZW-5000T	ZW-S5020 2M
30 ± 2 mm	18 μm	2 m		ZW-S5030 2M

Accessories				
Туре	Cable Length	Sensor Head		
Serial RS-232C Cable for personal computer	2m	ZW-XRS2		

Notes: Pen-shaped straight and right-angle sensor heads are also available. Shorter 0.3 meter sensor cables are available along with Extension Fiber Cables (2, 5, 10, 20, and 30 meters long).



ZX1 and ZX2 CMOS Laser Measurement Sensors

- Down to 1.5um resolution
- Best in class performance for accuracy and speed
- Increased measurement range
- Stable measurement for objects with any surface
- Simple configuration by one-button, Smart Tuning
- Compact size for quick mounting









ZX1 Sensor Heads with built-in Amplifier					
Range	Resolution	Connection	PNP Model	NPN Model	
50 ± 10 mm	2um		ZX1-LD50A81 2M	ZX1-LD50A61 2M	
100 ± 35 mm	7um	2 m Cable	ZX1-LD100A81 2M	ZX1-LD100A61 2M	
300 ± 150 mm	30um	2 III Cable	ZX1-LD300A81 2M	ZX1-LD300A61 2M	
600 ± 400 mm	80um		ZX1-LD600A81 2M	ZX1-LD600A61 2M	
ZX2 Sensor Heads					
Range	Resolution	Connection	Line-Beam Model	Spot-Beam Model	
50 ± 10 mm	1.5um	Amplifier Unit	ZX2-LD50L	ZX2-LD50	
100 ± 35 mm	5um	Amplifier Unit	ZX2-LD100L	ZX2-LD100	
ZX2 Amplifier Units					
Range	Resolution	Connection	PNP Model	NPN Model	
N/A	N/A	2 m Cable	ZX2-LDA41 2M	ZX2-LDA11 2M	



Sensor Cordsets

- Standard PVC or PUR cordsets for a wide variety of applications
- M8 and M12 connector sizes with 3 and 4 pin configurations
- Straight, right angle, and double ended variations available
- 2m, 5m, and 10m cordset lengths are available. Alternative lengths are also available





Naterial (Connector Size	No. of Pins	Length	Straight Connector	Right Angle Connector
			2 m	XS3F-M8PUR3S2M	XS3F-M8PUR3A2M
		3 Pins	5 m	XS3F-M8PUR3S5M	XS3F-M8PUR3A5M
	140		10 m	XS3F-M8PUR3S10M	XS3F-M8PUR3A10M
	M8		2 m	XS3F-M8PUR4S2M	XS3F-M8PUR4A2M
PUR			5 m	XS3F-M8PUR4S5M	XS3F-M8PUR4A5M
		4 Direct	10 m	XS3F-M8PUR4S10M	XS3F-M8PUR4A10M
		4 Pins	2 m	XS2F-M12PUR4S2M	XS2F-M12PUR4A2M
	M12		5 m	XS2F-M12PUR4S5M	XS2F-M12PUR4A5M
			10 m	XS2F-M12PUR4S10M	XS2F-M12PUR4A10M
			2 m	XS3F-M8PVC3S2M	XS3F-M8PVC3A2M
		3 Pins	5 m	XS3F-M8PVC3S5M	XS3F-M8PVC3A5M
	140		10 m	XS3F-M8PVC3S10M	XS3F-M8PVC3A10M
	MI8	M8	2 m	XS3F-M8PVC4S2M	XS3F-M8PVC4A2M
		4 Pins	5 m	XS3F-M8PVC4S5M	XS3F-M8PVC4A5M
DV.C			10 m	XS3F-M8PVC4S10M	XS3F-M8PVC4A10M
PVC			2 m	XS2F-M12PVC3S2M	XS2F-M12PVC3A2M
		3 Pins	5 m	XS2F-M12PVC3S5M	XS2F-M12PVC3A5M
	M12		10 m	XS2F-M12PVC3S10M	XS2F-M12PVC3A10M
	M12		2 m	XS2F-M12PVC4S2M	XS2F-M12PVC4A2M
		4 Pins	5 m	XS2F-M12PVC4S5M	XS2F-M12PVC4A5M
			10 m	XS2F-M12PVC4S10M	XS2F-M12PVC4A10M

Double-ended cordsets

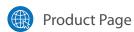
Material	Connector Size	No. of Pins	Length	Straight Connector	Right Angle (Socket)/Straight (Plug)
			2 m	XS2W-D421-D81-F	XS2W-D424-D81-F
PVC	M12	4	5 m	XS2W-D421-G81-F	XS2W-D424-G81-F
			10 m	XS2W-D421-J81-F	XS2W-D424-J81-F



S8VK - Complete Line Of Power Supplies

- Compact single-phase and three-phase power supplies
- Operating Temperature: -40°C to 70°C (S8VK-G and S8VK-T) and -25°C to 60°C (S8VK-C)
- 5 year warranty
- Power Boost Function: 120% for 10s (S8VK-G/T)





Line	Power	Output Voltage	Output Current	Capacity	Model
			2.5 A	60 W	S8VK-C06024
Economy		241/	5 A	120 W	S8VK-C12024
Single-Phase		24V	10 A	240 W	S8VK-C24024
			20 A	480 W	S8VK-C48024
		5V	3 A	15 W	S8VK-G01505
	100 to 240 VAC	12V	2.5 A	30 W	S8VK-G03012
	90 to 350 VDC		1.3 A	30 W	S8VK-G03024
General Purpose			2.5 A	60 W	S8VK-G06024
Single-phase		24V	5 A	120 W	S8VK-G12024
			10 A	240 W	S8VK-G24024
			20 A	480 W	S8VK-G48024
		48V	10 A	480 W	S8VK-G48048
			5 A	120 W	S8VK-T12024
	380 to 480 VAC	241/	10 A	240 W	S8VK-T24024
Three-phase	450 to 600 VDC	24V	20 A	480 W	S8VK-T48024
			40 A	960 W	S8VK-T96024
		24VDC	10A	24014	S8VK-WB24024
Environmentally Resistant		48VDC	5A	- 240W	S8VK-WB24048
3-Phase Power Supply	380V to 480 VAC	24VDC	20A		S8VK-WB48024
with Reduced Footprint and Predicitve	450 to 600 VDC"	48VDC	10A	480W	S8VK-WB48048
Maintnenace Features		24VDC	60A	0.001	S8VK-WB96024
		48VDC	30A	960W	S8VK-WB96048

Note: Tables include representative part numbers.



S8VK-X - Power Supply With EtherNet / IP

- Product replacement time, output voltage, output current, and more can be monitored remotely on the Ethernet/IP network
- Product status can be checked on-site using the indication monitor
- Remote monitoring with included software tool







Line	Power	Output Voltage	Output Current	Capacity	Model
EtherNet/IP Communication With Display EtherNet/IP Communication Without Display			3.75 A	90 W	S8VK-X09024A-EIP
			5 A	120 W	S8VK-X12024A-EIP
		24V	10 A	240 W	S8VK-X24024A-EIP
	100 to 240 VAC		2.5 A	60 W	S8VK-X06024-EIP
	90 to 350 VDC		3.75 A	90 W	S8VK-X09024-EIP
			5 A	120 W	S8VK-X12024-EIP
			10 A	240 W	S8VK-X24024-EIP
			20 A	480 W	S8VK-X48024-EIP

S8V-CP - Electronic Circuit Protector

- Compact design saves panel space compared to standard circuit breakers
- 3-step LED indicators for easy identification of channel status
- 4 and 8 channel models available with individual output current adjustments for various loads
- Available UL Class-2 output model







Product Page

Power	Output Voltage	Number of Outputs	Maximum Input Current	Adjustment Output Current	Model
24.VDC	24.VDC	4	40A	2 A up to 10 A	S8V-CP0424
24 VDC 24 VDC	8	70A	2 A up to 10 A	S8V-CP0824	

Note: Tables include representative part numbers.



H5CX-N - Digital Timer

- 15 Different timing settings
- High Precision and Excellent Performance
- Available IP66 rating with optional waterproof cover
- Time parameterization from 0.001s to 9999h

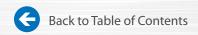






Power	Terminal Type	Output Type	Model
12 - 24V AC/DC	Screw	Relay	H5CX-AD-N AC24/DC12-24
		Transistor	H5CX-ASD-N DC12-24/AC24
100 - 240 VAC		Relay	H5CX-A-N AC100-240

Note: Tables include representative part numbers.



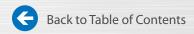
H5CC - Digital Timer

- The H5CC is the improved version of our digital timer with added visual clarity
- 15 different timing modes
- Replacement time notification function alert the user of potential maintenance needs.
- User-friendly interface in a white LCD screen
- Status indicators integrated into front buttons.





Power Supply	Terminal Type	Outputs	Model
100-240 VAC	Screw Terminal	Contact Output (time-limit SPDT)	H5CC-A
	Screw Terminal	Contact Output (SPDT) + Transistor	H5CC-AU
	11-pin Socket	Output (SPST)	H5CC-A11
12.40\/DC /24\/AC	Screw Terminal	Contact Output (time-limit SPDT)	H5CC-AD
12-48 VDC / 24 VAC		Contact Output (SPDT) + Transistor Output (SPST)	H5CC-AUD
24-240 VDC / VAC	11-pin Socket	Contact Output (time-limit SPDT)	H5CC-A11F



H7CC - Digital Counter & Tachometer

- The H7CC is a new and improved version of our digital counter with an available tachometer function
- Improved LED Display makes the screen easier to read
- LED indicators built into the push buttons for visual feedback
- Preventative maintenance features alert you when the product is nearing the end of it's life
- Simple and easy to use programming interface saves time

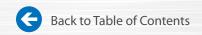




Туре	Classification	External Connections	Outputs	Power Supply Voltage	Model
		11 Pin	Contact output (SPDT)	100 to 240 VAC	H7CC-A11
	Preset Counter		Contact output (SPDT)	100 to 240 VAC	H7CC-A
H7CC-A	C-A Preset Counter / Tachometer	- Screw Terminals	Contact output (SPDT)	24 VAC / 12 to 48 VDC	H7CC-AD
			Contact output (SPST+SPDT)	100 to 240 VAC	H7CC-AW
			Contact output (SPST+SPDT)	24 VAC / 12 to 48 VDC	H7CC-AWD
H7CC-R	Tachometer	11 Pin	Contact output (SPDT)	100 to 240 VAC	H7CC-R11

Note: Tables include representative part numbers.

Please refer to the **Component selection guide** for more details.



G2RV-ST - Slim I/O Relay

- · Push-in plus Technology for easy wiring
- Lockable test switch models available for circuit troubleshooting
- LED/mechanical flag available for checking operation
- Slim 6mm width space saving
- Gold plate contact models available for micro loads





Coil Voltage	Contact Rating	Contact Form	Screw Terminal Model	Push-in Terminal Model	Individual Relay for Replacement
24 VDC			G2RV-ST700 DC24	G2RV-ST500 DC24	G2RV-1-S-G DC21
110 VAC	6 A	SPDT	G2RV-ST700 AC110	G2RV-ST500 AC110	C2DV 1.5.5 DC40
230VAC			G2RV-ST700 AC230	G2RV-ST500 AC230	G2RV-1-S-G DC48

Accessories

Description	Number of Poles	Red	Blue	Yellow
Jumper bar	20	PYDN-6.2T-200R	PYDN-6.2T-200S	PYDN-6.2T-200Y

G3NA - Hockey Puck Style Solid State Relay

- Compact Dimensions
- Built-in varistor
- LED operation indictator
- 5-90A output current





Isolation	Zero Cross Function	Indicator	Application Output Load	Rated Voltage Input	Model
Phototriac	Yes	Yes	10A at 24 to 240 VAC	5 to 24 VDC	G3NA-210B-UTU DC5-24
Phototriac	Yes	Yes	20 A at 24 to 240 VAC	5 to 24 VDC	G3NA-220B-UTU DC5-24
Phototriac	Yes	Yes	25 A at 24 to 240 VAC	5 to 24 VDC	G3NA-225B-UTU DC5-24

Note: Tables include representative part numbers.



G2R-S - Slim Mechanical Relay

- Lockable test switch models available for circuit troubleshooting
- LED/mechanical flag available for checking operation
- Available DIN-rail mount relay sockets
- · Slim 16mm design with socket





Coil Voltage	Contact Rating	Contact Form	Relay Socket Model	Relay Model
12 VDC				G2R-1-S DC12(S)
24 VDC	10 A	CDDT	D2DE7 055/D2DE 05 DU	G2R-1-S DC24(S)
120 VAC		SPDT	P2RFZ-05E/P2RF-05-PU	G2R-1-SN AC120(S)
240 VAC				G2R-1-SN AC240(S)
12 VDC		DPDT	P2RFZ-08E/P2RF-08-PU	G2R-2-S DC12(S)
24 VDC				G2R-2-S DC24(S)
120 VAC	5 A			G2R-2-S AC120(S)
240 VAC				G2R-2-S AC240(S)

MY-GS-R - General Purpose Ice Cube Relay

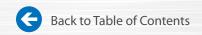
- DPDT type 10 A / 4PDT type 5 A
- Vibration resistance and reduced wiring time with push in plus technology
- Mechanical operation indicator
- Industry standard global certifications UL, CSA, IEC (VDE certification), and CQC
- Lockable test switch models available for circuit troubleshooting
- Low power switching (1 mA at 5 VDC) / Bifurcated 4PDT (0.1 mA at 1 VDC)





Coil Voltage	Contact Rating	Contact Form	Relay Socket Model	Relay Model
24VDC				MY2N-GS-R DC24
120VAC	10A	DPDT	PYFZ-08-E/PYF-08-PU	MY2N-GS-R AC110/120
220VAC				MY2N-GS-R AC220/240
24VDC				MY4N-GS-R DC24
120VAC	6A	4PDT	PYFZ-14-E/PYF-14-PU	MY4N-GS-R AC110/120
220VAC				MY4N-GS-R AC220/240

Note: Tables include representative part numbers.



E5CC/E5DC - General-Purpose Temperature Controllers

- High contrast white PV display
- High-speed sampling at 50ms
- Available auxiliary outputs, event inputs, a transfer output, and a remote SP input
- Short body with a depth of 60mm
- Available IP66 rating with optional waterproof cover
- Additional DIN sizes available 1/4, 1/8, 1/16, 1/32







Dimensions	Type of Input	Power	Type of Output	Auxiliary Output	Standard Model
			Relay		E5CC-RX3A5M-000
		100 -240 VAC	Voltage		E5CC-QX3A5M-000
48 x 48 x 60 mm			Current	SPST-NO contacts (Relay Output)	E5CC-CX3A5M-000
40 X 40 X 00 IIIIII		24 VAC / VDC	Relay		E5CC-RX3D5M-000
	Thermocouple, PT100,		Voltage		E5CC-QX3D5M-000
	Analogical		Current		E5CC-CX3D5M-000
		100-240 VAC	Relay		E5DC-RX2ASM-000
22.5mm		100-240 VAC	Current		E5DC-CX2ASM-000
For DIN rail mount		24VAC /VDC	Relay		E5DC-RX2DSM-000
		24VAC / VDC	Voltage		E5DC-QX2DSM-002

Limit & Basic Switches

- Limit switches and basic switches are electromechanical switches used to detect and limit motion within industrial environments
- Available in a wide variety of actuator arms, lever arms and plungers
- Multiple switch designs for use in a variety of applications and environments
- Additional limit and basic switch configurations available on Omron website





Туре	Series	Features	Applications	Models
	D4A	Wide temperature range from -40°C to +100°C (standard type) for use in heavy duty applications	Machine tool, material handling, palletizer, injection molding,	D4A-1101-N D4A-2918-N
General	WL-N	Two-circuit switch for reliable switching	packaging equipment, automotive hoist/lift machinery	WLG2-LD WLG2-LD-M1J
Limit Switches	D4C	Slim body and designed for easy side-by-side mounting (Plunger type: 6 switches maximum)	Machine tool, material handling, palletizer, packaging equipment, mobile lift equipment, robotics	D4C-1602 D4C-1601
	ZE	Long service life and high breaking capacity	Conveyor controls, packaging equipment, material handling,printing machinery, waste & recycling compacting machinery	ZE-NJ-2S ZE-N-2S
	Z	A large switching capacity of 15A and high repeat accuracy	Elevators, mobile lift equipment, forklift, injection molding, utility switchgear, controls for doors/gates/valves, foot switches	Z-15GQ-B Z-15GD-B
Basic	Х	Direct current switch that incorporates a permanent magnet in the contact mechanism to deflect arcs and increases switch life	Mobile lift equipment, forklift, injection molding,	X-10GW22-B X-10GW-B
Switches	DZ	Double pole double throw basic switch for two independent circuit control. Ideal for switching the circuits operating on two different voltages, and controlling two circuits.	utility switchgear, controls for doors/gates/valves, foot switches	DZ-10GW22-1B DZ-10GW-1B
	TZ	High temperature switch that maintains stable operation at an ambient temperature of 400°C	Industrial boilers, power plant, incinerators, industrial heaters	TZ-1GV TZ-1GV22

Note: Tables include representative part numbers.



K6CM - Motor Condition Monitor

- 24/7 remote monitoring of critical 3-phase induction motors
- Can monitor motor vibration, temperature, current, and insulation resistance depending on model
- EtherNet/IP and Modbus TCP communication
- Included monitoring software tool can monitor up to 10 motors at one time





Motor failure mode	Description	Power	Controller model	Sensor Model
Bearing Wear	Monitors motor vibration/ temperature with sensor	24 VAC/DC	K6CM-VBMD-EIP	K6CM-VBS1
Overload Condition	Monitors motor current and degradation level using a CT sensor	24 VAC/DC	K6CM-CI2MD-EIP	K6CM-CICB025 K6CM-CICB100 K6CM-CICB200 K6CM-CICB400
Insulation breakdown	Monitors motor insulation and current leakage with sensor	24 VAC/DC	K6CM-ISMD-EIP	K6CM-ISZBI52

K7DD - Adv. AC Motor Condition Monitor

- Comprehensive AC Motor Condition analysis with programable alerts
- Reduce or eliminate unplanned downtime through failure prediction
- Automates the measurement and condition analysis of AC motors with status indicators
- Transistor Alarm Outputs, RS-485 communication
- Especially useful for AC motors that change speed or direction often







Unit	Supply Voltage	Model	
Controlled Inde	100-240 VAC	K7DD- PQMA	
Controller Unit	24 VDC	K7DD- POMD	

Rated Primary-Side Current	Model	UL Compliant Models
5 A	K6CM-CICB005	K6CM-CICB005-C
25 A	K6CM-CICB025	K6CM-CICB025-C
100 A	K6CM-CICB100	K6CM-CICB100-C
200 A	K6CM-CICB200	K6CM-CICB200-C
400 A	K6CM-CICB400	K6CM-CICB400-C

Note: Tables include representative part numbers.



K6PM - Thermal Condition Monitor

- 24/7 remote thermal monitoring of equipment using infrared thermal image sensors
- Thermal Imaging Sensor that detects temperatures 32-392°F (0-200°C)
- EtherNet/IP and Modbus TCP communication
- Included monitoring software tool can monitor up to 155 sensors at one time





Power	Controller	Thermal image Sensor	
24 VAC/DC	K6PM-THMD-EIP	K6PM-THS3232	

K7TM – Heater Condition Monitor

- Three-phase and single-phase relays for voltage and current monitoring
- Complete line for monitoring sequence and phase drop, asymmetry, under or over control
- Supply voltages: 24 VAC/DC, 100 to 240 VAC, 380-480 VAC
- Special models for monitoring temperature and liquid level

Unit	Supply Voltage	Model
Controller Unit	100-240 VAC	K7TM-A2MA
Controller Unit	24 VAC/VDC	K7TM-A2MD
CT Clamp		
Rated Primary Side Current	Model	UL Compliant Models
5 A	K6CM-CICB005	K6CM-CICB005-C
25 A	K6CM-CICB025	K6CM-CICB025-C
100 A	K6CM-CICB100	K6CM-CICB100-C
200 A	K6CM-CICB200	K6CM-CICB200-C
400 A	K6CM-CICB400	K6CM-CICB400-C
600 A	K6CM-CICB600	-

Note: Tables include representative part numbers.









K8AK / K8DS – Monitoring Relays

- Three-phase and single-phase relays for voltage and current monitoring
- Complete line for monitoring sequence and phase drop, asymmetry, under or over control
- Supply voltages: 24 VAC/DC, 100 to 240 VAC, 380-480 VAC
- Special models for monitoring temperature and liquid level





Phase	Dimensions	Monitoring Type	Input	Output Contact Form	Model
		Over Current	24 VAC/DC or 100 to 240 VAC	SPDT	K8AK-AS2 24VAC/DC
Single-Phase	E-Phase K8AK - 22.5 x 90 x 100	Overvoltage and Undervoltage	24 VAC/DC or 100 to 240 VAC	SPDT	K8AK-VW2 24VAC/DC
[mm]	Phase Drop and Phase	200-480 VAC	DPDT	K8AK-PH1 200/500VAC	
Three Dhase	K8DS: 17.5 x	Sequence	200-460 VAC	SPDT	K8DS-PH1 200/480VAC
Three-Phase	80 x 69 [mm]	Phase Drop, Phase Sequence, Overvoltage and	200-240 VAC	(2) SPDT	K8AK-PM1 200/240VAC
		Undervoltage	380-480 VAC	(2) 3701	K8AK-PM2 380/480VAC

K7GE – Insulation Resistance Monitoring

- Reliable, Safe and Accurate Automatic Insulation Resistance Measurements
- Modular Product units for multiple motor insulation resistance monitoring
- 50 VDC measurement voltage
- Monitor up to 8 motors with additional probes
- Transistor Alarm Outputs, RS-485 communication
- Especially useful for servo/motors operating in harsh environments

Unit	Supply Voltage	Model
Controller Unit	100-240 VAC	K7GE-MGMA
Controller Unit	24 VAC/VDC	K7GE-MGMD
Probe Unit	_	K7GE-MG1







A2W - Wireless Pushbutton

- 8 pushbuttons can be assigned to one receiver unit
- Each receiver has 8 transistor outputs (one-shot operation)
- LED signal strength indicator on each button
- Battery-less pushbutton (uses self-generating power)





Туре	Button type	Frequency (MHz)	Area	Button color	Flange color	Model
	Mushroom		United States or Canada	Green	Black	A2W-TC-WC1 US1GB
	Full guard	922.5		Red	Black	A2W-TC-WC1 US2RB
Pushbutton				Green	Black	A2W-TC-WC1 US2GB
Pushbutton				Yellow	Black	A2W-TC-WC1 US2YB
				Blue	Black	A2W-TC-WC1 US2AB
				Black	Black	A2W-TC-WC1 US2BB

Туре	pe Frequency (MHz)		Output configuration	Model	
Receiver	Receiver 922.5		PNP	A2W-RCP-WC1 US	

Note: This product is a wireless device that conforms to the radio regulations of United States or Canada. It cannot be used outside of United States or Canada.

Accessories (sold separately)	Model	Remarks
High-sensitivity magnetic-base antenna	A2W-AT2.5-WC1	Frequencies: all frequencies supported, cable length 2.5 m Degree of protection: IP65

Note: Tables include representative part numbers.

Please refer to the **Component selection guide** for more details.

Note: Tables include representative part numbers.



A22N / M22N Push Buttons And Indicators

- Complete line with Ø 22mm assemblies
- Various colors and models with plastic or metallic bezels
- Color coded contact blocks to prevent assembly errors
- Easy installation and IP66 degree of protection





Туре	Bezel material	Color	Contact	LED Voltage	Model
A 22NINI - Durch - Durthon			1 NO		A22NN-RNM-NGA-G100-NN
A22NN - Push Button			1 NO	(2) 50 \(\frac{1}{2} \)	A22NN-RNM-NBA-G100-NN
A22NL - Lighted Push Button		(2) Color B – Red	1 NO	(3) LED Voltage N – No lighting	A22NL-BGM-TGA-G100-GC
AZZNE - Lighted Push Button	on	G – Green Y – Yellow W – White A – Blue B – Black	1 NO	A – 6 VAC/VDC B – 12 VAC/VDC C – 24VAC/VDC D – 100/120 VAC/VDC E – 200/240 VAC/VDC	A22NL-RPM-TRA-G100-RC
	(1) Bezel Material B – Plastic				M22N-BC-TYA-YC
M22N - Indicators	R – Metallic				M22N-BN-TGA-GC
A22NS - Selector			2 positions - 1NO		A22NS-2RM-NBA-G100-NN
AZZINS - Selector			3 positions - 2NO		A22NS-3RM-NBA-G101-NN
A22NK - Selector with Key			2 positions - 1NO		A22NK-2RM-01AA-G100
			2 positions - 1NO		A22NK-2RL-01BA-G100

Item	Model
Contact block 1NO	A22NZ-S-G1A
Contact block 1NC	A22NZ-S-G1B

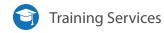


CP1H – MicroPLC for 4 Axis Position Control and High Speed Control

- High-speed counters with differential phases and pulse outputs for 4 axes control. Easily handles multi-axis control with a single unit.
- Up to two Ethernet ports and two serial ports when selecting the appropriate optional communications boards
- Up to 40 Built in I/O points with Analog I/O built in on XA CPU units
- Over 30 different expansion units for I/O, temperature sensing and communications







Туре		Output	Expandable	_	Data Memory	Power Supply	Output Method	Built-In Functions			Model
	Points	Points	up to*	Capacity	Capacity	r ower supply	output Mctilou	E	I/C	Р	Model
				20K steps	32K words	85 to 264 VAC	Relay output	4	8		CP1H-X40DR-A
CP1H-X with pulse outputs for 4 axes	24 16					20.4 to 26.4 VDC	Transistor output (sink type)	4	8	4	CP1H-X40DT-D
		16	220 naints				Transistor output (source type)	4	8	4	CP1H-X40DT1-D
CP1H-XA with built-in		10	320 points			85 to 264 VAC	Relay output	4	8		CP1H-XA40DR-A
analog I/O (4 analog inputs/2 analog outputs; 1/12,000							Transistor output (sink type)	4	8	4	CP1H-XA40DT-D
resolution)					20.4 to 26.4 VDC	Transistor output (source type)	4	8	4	CP1H-XA40DT1-D	
CP1H-Y with 1-MHz pulse I/O	12	8	300 points				Transistor output (sink type)	4**	6	4**	CP1H-Y20DT-D

Note: Built-in functions: E = Encoder inputs; I/C = Interrupts/counters; P = Pulse outputs

^{*}CP1H CPU series can be expanded with CP-series Expansion Units and CJ1 Special I/O Units.

^{**} Encoder inputs: 2x 1 MHz + 2x 100 kHz; Pulse outputs: 2x 1 MHz + 2x 100 kHz.



CP2E - Micro PLC for Data Collection and Machine-To-Machine Communication

- Up to five communications channels: dual Ethernet and up to three serial ports for data collection, machine-to-machine or IIoT
- Built-in I/O of either 14, 20, 30, 40 or 60 points with up to 180 I/O points when using expansion modules
- Up to four axes of motion control for precise machine movement







CP2E-N/Network Models

1/0					Specifications				
I/O points	Power Supply	Inputs	Outputs	Output Type	Communications	Axis	Option Boards	Expansion Units	Model
	100 to 240 VAC			Relay					CP2E-N14DR-A
	100 to 240 VAC			Transistor (sinking)					CP2E-N14DT-A
14		8	6	Relay	1 Ethernet port Up to 2 serial ports	2	1		CP2E-N14DR-D
	24 VDC			Transistor (sinking)					CP2E-N14DT-D
				Transistor (sourcing)					CP2E-N14DT1-D
	100 to 240 VAC			Relay					CP2E-N20DR-A
	100 to 240 VAC			Transistor (sinking)		2	1		CP2E-N20DT-A
20		12	8	Relay	1 Ethernet port Up to 2 serial ports				CP2E-N20DR-D
	24 VDC			Transistor (sinking)					CP2E-N20DT-D
				Transistor (sourcing)					CP2E-N20DT1-D
	100 to 240 VAC			Relay	2 Ethernet ports Up to 3 serial ports				CP2E-N30DR-A
	100 to 240 VAC			Transistor (sinking)			2		CP2E-N30DT-A
30		18	12	Relay		4		3	CP2E-N30DR-D
	24 VDC			Transistor (sinking)					CP2E-N30DT-D
				Transistor (sourcing)					CP2E-N30DT1-D
	100 to 240 VAC			Relay					CP2E-N40DR-A
	100 to 240 VAC			Transistor (sinking)	2.5:1				CP2E-N40DT-A
40		24	16	Relay	2 Ethernet ports Up to 3 serial ports	4	2	3	CP2E-N40DR-D
	24 VDC			Transistor (sinking)					CP2E-N40DT-D
				Transistor (sourcing)					CP2E-N40DT1-D
	100 to 240 VAC			Relay					CP2E-N60DR-A
	100 to 240 VAC			Transistor (sinking)	2 546				CP2E-N60DT-A
60		36	24	Relay	2 Ethernet ports Up to 3 serial ports	4	2	3	CP2E-N60DR-D
	24 VDC			Transistor (sinking)					CP2E-N60DT-D
				Transistor (sourcing)					CP2E-N60DT1-D



CP2E - Micro PLC (continued)

- Function block library for expedited program development
- Analog, high speed counters, pulse outputs, linear interpolation and PWM output facilitates a wide range of applications







CP2E-S/Standard Models

					Specifications				
I/O points	Power Supply	Inputs	Outputs	Output Type	Communications	Axis	Option Boards	Expansion Units	Model
30	100 to 240 VAC			Relay	1 x RS-232C port 1 x RS-485 port				CP2E-S30DR-A
	24 VDC	18	12	Transistor (sinking)		2		3	CP2E-S30DT-D
	24 VDC			Transistor (sourcing)					CP2E-S30DT1-D
	100 to 240 VAC		16	Relay	1 x RS-232C port 1 x RS-485 port	2		3	CP2E-S40DR-A
40	241/06	24		Transistor (sinking)					CP2E-S40DT-D
	24 VDC			Transistor (sourcing)					CP2E-S40DT1-D
	100 to 240 VAC			Relay				3	CP2E-S60DR-A
60	24 VDC	36	24	Transistor (sinking)	1 x RS-232C port 1 x RS-485 port	2			CP2E-S60DT-D
				Transistor (sourcing)					CP2E-S60DT1-D

CP2E-E/Essential Models

	Specifications										
I/O points	Power Supply	Inputs	Outputs	Output Type	Communications	Axis	Option Boards	Expansion Units	Model		
14		8	6	Relay	1 x RS-232C port			3	CP2E-E14DR-A		
20		12	8	Relay	1 x RS-232C port			3	CP2E-E20DR-A		
30	100 to 240 VAC	18	12	Relay	1 x RS-232C port			3	CP2E-E30DR-A		
40		24	16	Relay	1 x RS-232C port			3	CP2E-E40DR-A		
60		36	24	Relay	1 x RS-232C port			3	CP2E-E60DR-A		



CP1L - Micro PLC

- Compact PLC for up to 180 I/O points
- Programming via USB port or Ethernet port based on model
- Optional boards for Analog, Serial and Ethernet communication on select models
- Supports up to 4 encoders and 2 pulse train outputs (transistor models only)



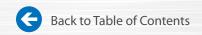




Family	Power Supply	Amount of I/Os in the CPU							
		Digital		Analog	Expansion Units	Communication Ports	Option Boards	Output Type	Model
		Inputs	Outputs	Inputs	Offics	1013	Doarus		
CP1L-EM	24 VDC	24	16	2 (0-10V)	3	Ethernet FINS	2	Transistor (sourcing)	CP1L-EM40DT1-D
	24 VDC	24	16	2 (0-10V)	3	Ethernet FINS	2	Relay	CP1L-EM40DR-D
	24 VDC	18	12	2 (0-10V)	3	Ethernet FINS	2	Transistor (sourcing)	CP1L-EM30DT1-D
	24 VDC	18	12	2 (0-10V)	3	Ethernet FINS	2	Relay	CP1L-EM30DR-D
CP1L-EL	24 VDC	12	8	2 (0-10V)	1	Ethernet FINS	1	Transistor (sourcing)	CP1L-EL20DT1-D
	24 VDC	12	8	2 (0-10V)	1	Ethernet FINS	1	Relay	CP1L-EL20DR-D
CP1L-M	100 to 240 VAC	24	16	No	3	USB	2	Relay	CP1L-M40DR-A
	24 VDC	24	16	No	3	USB	2	Relay	CP1L-M40DR-D
	24 VDC	24	16	No	3	USB	2	Transistor (sourcing)	CP1L-M40DT1-D
	100 to 240 VAC	18	12	No	3	USB	2	Relay	CP1L-M30DR-A
	24 VDC	18	12	No	3	USB	2	Relay	CP1L-M30DR-D
	24 VDC	18	12	No	3	USB	2	Transistor (sourcing)	CP1L-M30DT1-D
CP1L-L	24 VDC	12	8	No	1	USB	1	Transistor (sourcing)	CP1L-L20DT1-D
	24 VDC	12	8	No	1	USB	1	Transistor (sinking)	CP1L-L20DT-D
	100 to 240 VAC	12	8	No	1	USB	1	Relay	CP1L-L20DR-A
	24 VDC	12	8	No	1	USB	1	Relay	CP1L-L20DR-D
	24 VDC	8	6	No	1	USB	1	Transistor (sinking)	CP1L-L14DT-D
	100 to 240 VAC	8	6	No	1	USB	1	Relay	CP1L-L14DR-A

Expansion Modules and Accessories

Family	Communication Ports	Model	
	8 Inputs	CP1W-8ED	
	8 Relay Outputs	CP1W-8ER	
Digital Expansions	16 Relay Outputs	CP1W-16ER	
	12 Inputs and 8 PNP Transistor Outputs	CP1W-20EDT1	
	24 Inputs and 16 Relay Outputs	CP1W-40EDR	
	4 Inputs (0 to 5V, 1 to 5V, 0 to 10V, -10 to + 10V, 0 to 20mA and 4 to 20mA)	CP1W-AD042	
Analog Expansions	4 Outputs (1 to 5V, 0 to 10V, -10 to + 10V, 0 to 20mA and 4 to 20mA)	CP1W-DA042	
Resolution of 12000 points	2 Inputs (0 to 5V, 1 to 5V, 0 to 10V, -10 to + 10V, 0 to 20mA and 4 to 20mA) 1 Output (1 to 5V, 0 to 10V, -10 to + 10V, 0 to 20mA and 4 to 20mA)	CP1W-MAD42	
	RS-232C Serial Port (15m Distance)	CP1W-CIF01	
Optional Communication Adapters	RS-422A/485 Serial Port (50m Distance)	CP1W-CIF11	
	RS-422A/485 Serial Port (500m Distance)	CP1W-CIF12	
Software Programming Software with 1 license		CXONE-AL01D-V4	



NX1P-

Machine Automation Controllers

- Compact entry model with integrated motion and machine control. Connectivity to safety and vision systems
- Up to 4 axes of coordinated motion control plus 4 axes point to point control
- Expandable I/O using up to 8 NX series I/O cards on local bus
- Built in EtherCAT and EtherNet/IP ports
- Connect up to 16 EtherCAT Slaves
- Sysmac Studio IDE for flexible, scalable programming









Built-In Digital I/O Digital		Specifications	Number of Coordinated		Total Axes	Option Boards	Model
Inputs	Outputs		axes* point	point axes**	point axes**		
14	10	1.5MB of programming	0		4	1 Slot	NX1P2-9024-DT1
24	16	memory, min cycle time	2	4	6	2 Slots	NX1P2-1040-DT1
24	16	up to 2ms	4	8	2 31013	NX1P2-1140-DT1	

- * Coordinated Axes Include:
- Point to Point Point Positioning
- Synchronized Motion (Gearing/Camming)
- Multi-Axes Coordinated Motion (Circular/Linear Interpolation)
- Axes grouping

- **Point to Point axes Include:
- Only Point to Point Positioning
- No Synchronized Motion
- No Multi-Axes Coordinated Motion
- No Axes Grouping

Note: PNP transistor Output options shown. For NPN options, go toautomation.omron.com

Option Boards

Туре	Description	Communication Protocol	Model
	1 x RS-232C port Transmission Distance: 15 m Connector type: Spring terminal (9 terminals)		NX1W-CIF01
Serial Communication	1 RS-422A/485 Transmission Distance: 50 m Connector type: Spring terminal (5 terminals)	Host link, Modbus-RTU Master and no-protocol	NX1W-CIF11
	1 RS-422A/485 port (isolated) Transmission Distance: 500 m Connector type: Spring terminal (5 terminals)		NX1W-CIF12
	2 x Analog inputs Voltage input: 0 to 10 V (Resolution Input current: 0 to 20 mA (1/2 Connector type: Spring terminal (5	NX1W-ADB21	
Analog Inputs and Outputs	2 x Analog inputs / 2 x Analog o Voltage input: 0 to 10 V (Resolution Input current: 0 to 20 mA (1/2, Voltage output: 0 to 10 V (Resolution Connector Type: Spring terminal (8	NX1W-MAB221	

Note: The expansion cards of the NX1P machine controller line are the same as the NX Series I/O cards. For information on virtual axes, refer to the catalog on the website automation.omron.com

Software and Switches

Туре	Description	Model				
Software	Sysmac Studio IDE Lite Version 1 License	SYSMAC-SE201L				
	Hub EitherCAT with 3 Ports	GX-JC03				
Hub	Hub EitherCAT with 3 Ports	GX-JC06				
Tiub	Hub EitherNet/IP with 3 Ports	W451-03B				
	Hub EitherNet/IP with 5 Ports	W451-05B				



NX102 - Machine Automation Controller

- Compact controller integrates production line, safety systems, and IT systems
- EtherCAT (1 port) and EtherNet/IP (2 ports) communication on the same CPU
- OPC UA server functionality
- Up to 8 axes of coordinated motion plus 4 axes of point-to-point control
- Embedded SQL Client Option
- Connect up to 64 EtherCAT slaves
- Expandable IO using up to 32 NX Series I/O cards on local bus
- Sysmac Studio IDE for flexible, scalable programming





Product Page

Training Services



Product Video



Fieldbus Communication Configuration

Family	Specifications	Number of Coordinated axes *	Number of point- to-point axes **	Total Axes	SQL	Model
		0		4	No	NX102-9000
			4	4	Yes	NX102-9020
				6	No	NX102-1000
NV4.00	5 MB of programming memory, Min. cycle up				Yes	NX102-1020
NX102	to 1ms	4			No	NX102-1100
				8	Yes	NX102-1120
		8		12	No NX102	
				12	Yes	NX102-1220

Note: The NX-END02 terminal cover is included with the NX102. The HMC-SD291 memory card is supplied with the NX102-__20. The battery is not mounted when the product is shipped. Refer to the datasheet for details.

For information on virtual axes, refer to the catalog on Omron website automation.omron.com

- * Coordinated Axes Include:
- Point to Point Point Positioning
- Synchronized Motion (Gearing/Camming)
- Multi-Axes Coordinated Motion (Circular/Linear Interpolation)
- Axes grouping

- **Point to Point axes Include:
- Only Point to Point Positioning
- No Synchronized Motion
- No Multi-Axes Coordinated Motion
- No Axes Grouping

Software and Switches

Туре	Description	Model
Software	tware Sysmac Studio IDE Lite Version 1 License S	
	Hub EitherCAT with 3 Ports	GX-JC03
Hub	Hub EitherCAT with 3 Ports	GX-JC06
Hub	Hub EitherNet/IP with 3 Ports	W451-03B
	Hub EitherNet/IP with 5 Ports	W451-05B



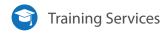
NX502 - Machine Automation Controller

- EtherCAT® 250µs EtherCAT® Refresh Speed
- Up To 254 CIP Safety Connections with: NX-SL5700 and four NX-EIP201 units
- 256 EtherCAT® Nodes
- 512 tag sets per EIP Unit
- OPC UA and SQL as standard while also leveraging Sysmac Studio MQTT function blocks
- Up to 64 axis of motion control
- 80 MB of program capacity
- Plug and Play Compatible with:
 - Omron's complete line of NX I/O
 - Omron's integrated software environment Sysmac Studio
 - Omron Vision, Motion, Robotics, and Safety Components
- Leverage the strength of multiple industrial protocols including: EtherCAT®, IO Link, EtherNET I/P, CIP Safety









Fieldbus Communication
Configuration

Family	Specifications	I/O Capacity	Coordinated Axes ¹	Total Axes	OPC UA	SQL	Model
			16	16	Yes	Yes	NX502-1300
NX502	5 MB of programming memory, Min. cycle up to 0.25ms	1024 Points local	32	32	Yes	Yes	NX502-1400
			64	64	Yes	Yes	NX502-1500

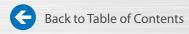
Note: The NX-END02 terminal cover is included with the NX502. The battery is not mounted when the product is shipped. Refer to the datasheet for details.

For information on virtual axes, refer to the catalog on Omron website automation.omron.com

- 1. Coordinated Axes Include:
 - · Point to Point Point Positioning
 - Synchronized Motion (Gearing/Camming)
 - Multi-Axes Coordinated Motion (Circular/Linear Interpolation)
 - · Axes grouping

Software and Network Card

Туре	Description	Model
Software	Sysmac Studio Standard Edition, One Seat	SYSMAC-SE201L
Network Card	NX502 Ethernet I/P Module	NX-EIP201



NJ-

Machine Automation Controllers

- One integrated controller designed to meet extreme requirements in terms of logic sequence, motion control speed, accuracy, and system size
- EtherCAT and Ethernet IP communication on the same CPU
- Ability to manage logic, motion, safety and vision tasks
- Embedded SQL Client Option
- Expandable I/O Using up to 10 CJ Expansion cards
- Sysmac Studio IDE for flexible, scalable programming







Training Services



Family	Specifications	Number of axes	OPC UA	SQL	Model
		0	No	No	NJ101-9000
NJ1	64 EtherCAT slaves, 3 MB of programming memory, Min. cycle time: 1ms	0	No	Yes	NJ101-9020
IVJI		2	No	No	NJ101-1000
			No	Yes	NJ101-1020
NID		4	No	No	NJ301-1100
NJ3	192 EtherCAT slaves, 5 MB of programming memory, Min. cycle time: 1ms		No	No	NJ301-1200
NJ5	102 Ethay CAT claves 20 MP of avagramming manage. Min. sucle times 0 E.ms	16	Yes	No	NJ501-1300
INJO	192 EtherCAT slaves, 20 MB of programming memory, Min. cycle time: 0.5 ms	16	No	Yes	NJ501-1320

Note: For information on virtual axes, refer to the catalog on the website automation.omron.com

Power Supplies

Power Supplies	Capacity	RUN Indicator	Model
100 to 240VAC	2014	NO Delevi	NJ-PA3001
24 VDC	30W	NO Relay	NJ-PD3001

Software and Switches

Туре	Description	Model
Software	Sysmac Studio IDE 1 License	SYSMAC-SE201L
	Hub EtherCAT with 3 Ports	GX-JC03
Hub	Hub EtherCAT with 6 Ports	GX-JC06
nub	Hub EtherNet/IP with 3 Ports	W4S1-03B
	Hub EtherNet/IP with 5 Ports	W4S1-05B



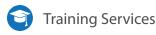
NX7 -

Machine Automation Controllers

- Highest performance Sysmac CPU, designed to address the most demanding industrial control and motion applications, laying the infrastructure for Big Data support
- EtherCAT (1 port) and EtherNet/IP (2 ports) communication on the same CPU
- · Dual-core Motion
- 128 or 256 Axes of Motion
- Embedded SQL Client Option
- Sysmac Studio IDE for flexible, scalable programming









Fieldbus Communication Configuration

Family	Specification	Number of Coordinated Axes	SQL	Model Number	
NX7	80 MB of programming memory, minimum cycle time 0.125 ms	128	YES	NX701-1620	
Power Supplies	Capacity	RUN Indicator	Model		
100 to 240VAC	90W			NX-PA9001	
24 VDC	70W	NO Relay	NX-PD7001		
Software and Switches	Description		Model		
Software	Sysmac Studio IDE Lite Version 1 Licen	se	SYSMAC-SE201L		
	Hub EitherCAT with 3 Ports	Hub EitherCAT with 3 Ports			
Hub	Hub EitherCAT with 3 Ports		GX-JC06		
	Hub EitherNet/IP with 3 Ports	Hub EitherNet/IP with 3 Ports			
	Hub EitherNet/IP with 5 Ports	Hub EitherNet/IP with 5 Ports			

NX-TC -

Multi-Loop Temperature Controller

- 2 or 4 loop models
- PID control
- Ethernet/IP&EtherCAT with PLC/Coupler
- · Voltage out and Current Out models
- Ability to specify variable to output
- Heater Burnout detection







Product Page



Training Services

Product Name	Number of channels	Input Type	Output	Output Capacity	CT Input Capacity	Control Type	Conversion Time	I/O Refreshing Method	Model
Temperature Control Unit 2Ch 2	2.61			2 points	2 points	Standard Control	50 m sec	Free-Run refreshing	NX-TC2405
Type	2 Ch	Multi-input (Thermocouple	Voltage	4 points	None	Heating & Cooling Control			NX-TC2407
		& Resistance Thermometer)	(for SSR control)	4 points	4 points	Standard Control			NX-TC3405
Temperature Control Unity	4 Ch			4 points	None	Standard Control			NX-TC3406
4Ch Type				8 points	None	Heating & Cooling Control			NX-TC3407



NX -Remote I/O

- Wide variety of high density remote I/O Modules
- Ideal match with Sysmac Machine automation controllers
- EtherCAT and EtherNet/IP coupler options
- Platform Agnostic. Easy connectivity to 3rd party systems
- Removable wiring terminals for easy system assembly and testing







Туре	Description	Model
	8 Digital Inputs (NPN)	NX-ID4342
	8 Digital Inputs (PNP)	NX-ID4442
	16 Digital Inputs (NPN)	NX-ID5342
	16 Digital Inputs (PNP)	NX-ID5442
	32 Digital Input (NPN)	NX-ID6342
Distribution	32 Digital Input (PNP)	NX-ID6442
Digital I/O	8 Relay NO Outputs	NX-OC4633
	8 Digital Outputs (NPN)	NX-OD4121
	8 Digital Outputs (PNP)	NX-OD4256
	16 digital outputs (NPN)	NX-OD5121
	16 digital outputs (PNP)	NX-OD5256
	32 Digital Output (PNP)	NX-OD6121
	4 4-20 mA Analog Inputs	NX-AD3203
Analog I/O	4 4-20mA Analog Outputs	NX-DA3203
Analog I/O	4 Analog Inputs -10 to +10 V	NX-AD3603
	4 Analog Outputs -10 to +10 V	NX-DA3603
Town every sentral	4Thermocouple Inputs	NX-TS3101
Temperature control	4 RTD Inputs	NX-TS3201
Weighing	1 Input for Load Cell	NX-RS1201
Position control	1 Line-Driver Pulsed Output	NX-PG0122
Position control	1 Incremental Encoder Input	NX-EC0122
Serial Communication	1 RS232C Interface	NX-CIF101
Serial Communication	1 RS485/422A Interface	NX-CIF105
lloT	IO-Link Master Interface for 4 IO-Link Devices	NX-ILM400
	Additional Supply for I/Os (4A)	NX-PF0630
Accessories	Additional Supply for I/Os (10A)	NX-PF0730
	Additional Source for Communication Bus	NX-PD1000

COUPLERS Network	Communications Cycle	Current Consumption	Maximim I/O power supply current	Model
EtherCAT	250 to 4,000 μs	1.45 W or lower	4A	NX-ECC201
	230 to 4,000 μs	1.45 W OI lowel		NX-ECC202
	125 to 10,000 μs	1.25 W or lower	10A	NX-ECC203
EtherNet/IP	-	1.50W or lower		NX-EIC202
SLAVE LINIT Network	IO Data Undate	Refresh Mode	Model	

SLAVE UNIT Network	IO Data Update	Refresh Mode	Model
EtherCAT	1.5 ms	Free Run	NX-ECT101



NXR - IP67 EthernetIP Remote IO-Link Master

- Fully configurable ports with up to 8 IO-Link connections, or 2 digital I/O per port (16 Total)
- 2 A max output load current per I/O point
- Rotary Switches for IP address setting
- LED status and output indication
- Connect up to 8 IO-Link hubs per master, totalling 128 digital I/O per EthernetIP Connection
- Autoconfigure IO-Link devices by 1 click in the software, or by 1 message from the controller







Unit	IO Capacity	Max Output Load Curent	Model
IO-Link Master	8 IO-Link ports (or up to 16 Digital I/O)	2 A per point	NXR-ILM08C-EIT
IO-Link Hub	16 Digital Inputs	N/A	NXR-ID166C-IL2
	16 Digital Inputs/Outputs	0.5 A per point	NXR-CD166C-IL2

Accessories¹

Unit	Description	Model
Y Cable Splitter	For connecting two devices to one port	XS5R-D426-1

1. Refer to the datasheet for recommended power and communication cables



NX-HTC - Multi-Loop Temperature Controller

- 4 loop and 8 loop models
- 40% Footprint Reduction vs. NX-TC
- .01 °C Temperature Resolution when used with K-type, PT100 thermocouple
- Waveform Digitialization Function Monitors 16 different process features
- Disturbance Suppression Technology
- For use with PLC or IPC









Model	Number of Channels	Input type	Output	Output Capacity	CT Input Capacity	Control type	Safety Standard
NX-HTC4505	8ch	Full Multi-input	Voltage output (for driving SSR)	8 points	8 points	Standard control	
NIV LITCOS 10	4-1-	(Thermocouple, resistance thermometer and analog	Heating output: Voltage output (for driving SSR)	4	4 mainte	Heating and	UC1, CE, RCM, KC, EAC
NX-HTC3510 4ch	input)	Cooling output: Linear current output	4 points	4 points	Cooling control		

NX-V680C - RFID Units

- Data reads/writes are easily performed by simply setting parameters in the machine automation controller memory area
- Simple device configuration, compared to serial communication, coupled with high-speed data processing
- Communication programs can be easily built using the ladder program function blocks "Sysmac Library RFID Communications Library (SYSMAC-XR019)"







Training Services

Model	Number of Antennas/Amplifiers	Antenna/Amplifier	Operating Frequency	RFID Standard	
NX-V680C1	1	VC00 Carias	12 5 C MIL	150 45602	
NX-V680C2	2	V680 Series	13.56 MHz	ISO 15693	

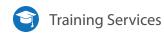


Sysmac Studio-Integrated Design Environment

- Configuration, programming, monitoring in a single interface
- Logic, motion and drives, safety, visualization, sensing, IoT in one project
- Built in Simulator
- · One time license fee







License Type	Part Number	# of Users
	SYSMAC-SE201L	1
	SYSMAC-SE203L	3
Cusmos Studio Standard Edition	SYSMAC-SE210L	10
Sysmac Studio Standard Edition	SYSMAC-SE230L	30
	SYSMAC-SE250L	50
	SYSMAC-SE2XXL	Site
	SYSMAC-LE201L	1
Sysmac Studio LIte Edition	SYSMAC-LE203L	3
	SYSMAC-LE210L	10
	SYSMAC-LU501L	1
Upgrade from Lite to Standard	SYSMAC-LE203L	3
	SYSMAC-LE210L	10
Sysmac Studio Vision Edition	SYSMAC-VE001L	1
Sysmac Studio Measurement Edit	SYSMAC-ME001L	1
Sysmac Studio NX/I-O Edition	SYSMAC-NE001L	1
Sysmac Studio Drive Edition	SYSMAC-DE001L	1
Sysmac Studio Safety Edition	SYSMAC-FE001L	1

os	СРИ		RAM	Display
Windows 7 (32-bit)	Minimum ¹	IBM AT or compatible with Intel® Celeron® processor 540 (1.8 Ghz)	2 GB	XGA 1,024 x 768, 16 million colors
Windows 8 (32-bit) Windows 8.1 (32-bit) Windows 10 (32-bit or 64-bit edition)	Recommended ^{2,3}	IBM AT or compatible with Intel® Core™ i5 M520 processor (2.4 GHz) or equivalent	4 GB min.	WXGA 1,280 x 800x 16 million colors

^{1.} If you create a user program with a memory size that exceeds 20 MB, use the 64-bit edition of the operating system and 8 GB or more of RAM.

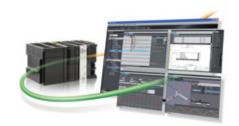
^{2.} If the user program is large, we recommend that you use a 64-bit IBM AT or compatible with an Intel $^{\circ}$ Core $^{\text{m}}$ i7 processor or better and 8 GB or more of RAM.

^{3.} If you use the Robot Additional Option and execute Vision and Robot integrated simulations, use a 64-bit IBM AT or compatible with an Intel® Core™ i5 processor or better and 8 GB or more of RAM.

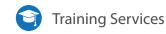


Sysmac Studio-Integrated Design Environment

- Configuration, programming, monitoring in a single interface
- Logic, motion and drives, safety, visualization, sensing, IoT in one project
- Built in Simulator
- One time license fee







		Sysmac Studio Standard	Sysmac Studio Lite	Sysmac Studio Vision	Sysmac Studio Measurement	Symac Studio Drive	Sysmac Studio Safety	Sysmac Studio NX
	NX1P2	•	•					
	NX102	•	•					
	NJ1	•	•					
Logic	NJ3	•						
	NJ5	•						
	NX7	•						
НМІ	NA5	•	•					
1/0	NX I/O EtherCAT Coupler	•	•					
I/O	NX I/O EtherNet/ IP Coupler	•	•					•
	FH	•	•	•				
Vision	FHV7	•	•	•				
	FQM	•	•	•				
	NX-SL3	•	•				•	•
Safety	NX-SL5/CSG	•	•				•	
	15	•	•			•		
Motion	G5	•	•			•		
Measurement	ZW	•	•		•			

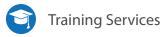


NB - Basic Graphic HMI

- 65K Color TFT display with LED backlight
- Data Logging/Trending, Recipes, Alarms, Remote web viewing
- Graphics Library and Animation
- Free NB Designer programming software
- Preferred for Omron CP controllers







6:	Description	Model		
Size	Communication Port	Resolution	Model	
3.5"	RS232C/RS422		NB3Q-TW00B-V1	
5.6"	RS232C/RS422, Ethernet	320 × 234	NB5Q-TW01B-V1	
5.6"	RS232C/RS422		NB5Q-TW00B-V1	
7"	RS232C/RS422, Ethernet		NB7W-TW01B-V1	
7"	RS232C/RS422	800 x 480	NB7W-TW00B-V1	
10"	RS232C/RS422, Ethernet		NB10W-TW01B-V1	

Note: For more information, refer to the catalog on the website automation.omron.com



NA - Advanced High Resolution Graphic Display

- Wide screen high resolution display with 16M colors
- Multimedia including video, Word, Excel and PDF viewers
- Sysmac Studio provides the integrated development environment
- Preferred for NJ/NX controllers







Training Services

Ci	Description	Madel		
Size	Communication Port	Resolution	Model	
7"	2 Ethernet, USB, RS232	000 v 400	NA5-7W001B-V1	
9"		800 x 480	NA5-9W001B-V1	
12.1"		1200 000	NA5-12W101B-V1	
15.4"		1280 x 800	NA5-15W101B-V1	

Note: Part numbers are for black bezel. Silver bezel available.



Soft NA - Software to Emulate the NA Advanced Graphic Display on an Industrial PC

- Sysmac Studio provides the integrated development environment.
- Design or Re -Use applications from the NA Graphic display on your choice of Industrial PC. Omron NY Series of IPC preferred.
- Run Soft-NA and other applications such as Enterprise Resource Planning or others, on an IPC.
- Windows 10 OS based and preferred for NJ/NX controllers.
- Preferred for NJ/NX controllers







Product Name	Specifications	Number of licenses	Media	Model
	The Soft-NA is software that displays information on FA manufacturing	- (Media only)	DVD	NA-RTSM
Soft-NA	sites while providing safety, reliability, and maintainability as an industrial display on which operations can be preformed as necessary. The Soft-NA runs on the following OS:	1 license	USB dongle	NA-RTLD01
		3 licenses		NA-RTLD03
	Windows 10 Pro Version 1903 or later 64 bit	10 licenses		NA-RTLD10



NY - Industrial PC

- · No internal cables eliminates faults, maximizes uptime
- · Unique simplified thermal design cuts downtime
- Powerful Intel® CoreTM technology for optimum performance
- Options for models with no moving parts increasing reliability
- Box and Panel mount versions







Family	Operational System	CPU	RAM Memory	Storage	Туре	Model
		Intel Xeon E3-1515M v5				NYB1E-313K1
		Intel Core i7-7820EQ				NYB27-314K1
NIVD		Intel Core i5-7300U		128GB SSD	Day DC	NYB35-313K1
NYB		Intel Core i5-7300U			Box PC	NYB35-313K1
	Windows 10 IoT	Intel Celeron 2980U	8GB			NYB2C-313K1
	Enterprise LTSB 64bit	Intel Core ATOM E3940		64GB SSD		NYB2A-30450
	OFFICE	Intel Core i7-7820EQ		128GB SSD		NYP27-314K1-15WC1000
		Intel Core i5-7300U				NYP35-30350-19WC1000
NYP		Intel Core i5-7300U		64GB SSD	Monitor Panel 12", 15", 19"	NYP35-31391-15WC1000
		Intel Celeron 2980U		12000 000		NYP2C-313K2-15WC1000
		Intel Core ATOM E3940	1	128GB SSD		NYP2A-30460-19WC1000

Note: The NYB family does not come with an industrial monitor.

NYM - Industrial Monitor

- Multitouch projected capacitive touchscreen
- False touch detection (palm, water)
- Operator can wear gloves
- Optional NY Monitor Link interface for connectivity up to 100m
- Custom logo option





Item	Size	Resolution	Interface	Model
	18.5"	- 1,280 x 800	DVI-D	NYM19W-C1000
	15.4"			NYM15W-C1000
	12.1"			NYM12W-C1000
Industrial Monitor	18.5"			NYM19W-C1060
	15.4"		NY Monitor Link	NYM15W-C1060
	12.1"			NYM12W-C1060



NY5 - IPC Machine Controller

- Models available with Al function and with NC function
- Real Time Operating System runs independently of the Windows OS
- Program the machine control with Sysmac Studio using ladder, ST, SFC.
- Machine control program portable to modular NJ controller
- Available in box and panel versions







Operational System	CPU	Number of axes	RAM Memory	Storage	Туре	Model
Windows Embedded Standard 7 64 bit	Intel Core i7 4700EQ	64	8 GB	64GB SSD	15.4" Monitor Panel	NY532-1500- 112213910
		32				NY532-1400- 112213910
		16				NY532-1300- 112213910

Note: For models with NC function or with Artificial Intelligence function, refer to the catalog on the website automation.omron.com

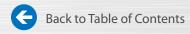
Omron AVEVA Edge

- Omron AVEVA™ Edge offers an Integrated Development Environment (IDE) with the Omron driver set that allows you to design once and deploy anywhere for most Omron control platforms.
- Omron AVEVA[™] Edge SCADA The full Windows based runtime offers all the tools you need for advanced SCADA applications
- Omron AVEVA™ Edge HMI AVEVA Edge for embedded systems such as Windows Embedded operating systems. The small footprint makes AVEVA Edge HMI ideal for embedded and edge machines





Development or Development and Runtime	Runtime	
Omron Aveva Edge Unlimited Tags		
Omron Aveva Edge 512K Tags	Omron Aveva Edge 512KTags	
Omron Aveva Edge 64K Tags	Omron Aveva Edge 64K Tags	
Omron Aveva Edge 32K Tags	Omron Aveva Edge 32K Tags	
Omron Aveva Edge 16K Tags	Omron Aveva Edge 16K Tags	
Omron Aveva Edge 4K Tags	Omron Aveva Edge 4K Tags	
Omron Aveva Edge 1.5K Tags	Omron Aveva Edge 1.5K Tags	
Omron Aveva Edge 300 Tags	Omron Aveva Edge 300 Tags	
Omron Aveva Edge 150 Tags	Omron Aveva Edge 150 Tags	



MicroHAWK V320-F/V330-F/V420-F/V430-F Barcode Reader

- Ultracompact readers, with several model options and setting possibilities
- High performance in reading 1D and 2D codes on any surface, including Direct Part Marks
- Extremely simple setting via browser WebLink, without the need for software installation
- Autofocus with liquid lens (V420-F and V430-F)







Product Video



Training Services

Line	Acquisition	Sensor	Focus	Communication	Lighting	IP	Power	Model		
1/220 F	52 fps	0.34 MP Mono	F: 1400	RS-232C, USB/HID, or	Built-in White			V320-F102W03M-NNX		
V320-F	40 fps	1.2 MP Mono	Fixed 102mm	Ethernet via USB (USB 2.0 Full-Speed)	& Red	ID 40	5VDC	V320-F102W12M-NNX		
1/220 F	60 fps	0.34 MP Mono	F: 1400	5.1 . TCD/ID	Built-in White	IP40	36 to 57 VDC	V330-F102W03M-NNX		
V330-F	42 fps	1.2 MP Mono	Fixed 102mm	Ethernet TCP/IP & Red		(PoE, IEEE 802.3af)	V330-F102W12M-NNX			
	60 fps	0.34 MP Mono		RS-232C, USB/HID, or Ethernet via USB (USB 2.0 Full-Speed)		IP54	5VDC	V420-F000W03M-SRX		
V420-F	V420-F 42 fps	1.2 MP Mono	Autofocus 50-300mm		Built-in White & Red +			V420-F000W12M-SRX		
	42 fps	1.2 MP Mono	Autofocus 75-1200mm					V420-F000L12M-SRX		
	60 fps	0.34 MP Mono	A	RS-232C, Ethernet TCP/IP. EtherNet/IP.	(8 LEDs RS-232C, Ethernet TCP/IP, EtherNet/IP,	RS-232C, Ethernet	External Red (8 LEDs) RS-232C, Ethernet			V430-F000W03M-SRX
	42 fps	1.2 MP Mono	Autofocus 50-300mm					(0 LLD3)		
V430-F	42 fps	1.2 MP Mono	Autofocus 75-1200mm				IP65/67	5 to 30 VDC	V430-F000L12M-SRX	
	42 fps 1.2 MP Mono Autofocus 50-300mm	7.5	External Red (24 LEDs)			V430-F000M12M-RRX				

Cables And Accessories

Product	Туре	Description	Model
	Power, I/O, Serial and USB	Cable with RJ50 connector, 3m	V320-W8-3M
V320-F	RJ50/DB-15 Converter	RJ50 Cable for DB-15, 1m	V320-WR-1M
	Programming	DB-15 cable for USB, 1m	V420-WUB-1M
V330-F	Standard Ethernet Cable	RJ45 Cable for RJ45	XS6W-5PURBSS_00CM-G
V420-F	Programming	DB-15 cable for USB, 1m	V420-WUB-1M
VE420 E	Power, I/O and Serial	Cable with 12-pin M12 connector	V430-W8M
VF430-F	Ethernet	Cable with 8-pin M12 connector for RJ45	V430-WEM



V410-H - Handheld Barcode Reader

- Labels or Direct Part Mark barcode reading
- High resolution 1280 x 800 pixels
- Read ranges from contact to 28 inches
- Intuitive and insightful WebLink PC utility and run time with image storage, statistics, reader discovery, troubleshooting and extensive tool tips





Name	Decoding Algorithms	Read Range (10 mil DataMatrix)	Communication	IP Rating	Application	Model
V410-H XD	1D/2D, X-Mode	0 - 12 cm / 0 - 4.6 in			Direct Part Mark and Labels	V410-HDS4608XD
V410-H SR	10/20	2.5 – 29 cm / 1 –11.5 in	RS-232 / USB	IP52	Labels only	V410-HDS4608SR
V410-H HC	1D/2D	0.5 – 24 cm / 0.2 – 9.5 in			Healthcare / Disinfectant resistant	V410-HDS4608HC

Cables And Accessories

Product	Type Description		Model
	Cable (Required)	CABLE ASSY, UNIVERSAL STYLE 3 USB, 2m, SHIELDED MOD PLUG-V410-H	V410-WUB-2M
	Cable	CBL ASSY, RS232, DB9F, 2m, for connection to communication module or PLC	V410-WR-2M
V410 H	Power Supply	Power Supply required for V410-WR-2M RS-232 Cable	V410-AC0-1
V410-H Intelligent Stand		Stand/holder for using in Hands-free mode	V410-AS0
	Communication Module	Serial to Ethernet TCP and EIP DIN rail mounted converter	OEI-EA3600-R1CP-11
	Cable	2m Serial Cable for OEI-EA3600	OEI-CBA-RF2-CO9ZAR



V450-H - Handheld Barcode Reader

- Versatile, powerful decode performance for any application
- Simple Application Configuration via WebLinkPC
- Point-and-shoot decode performance
- Withstands multiple drops from 8' and 5,000 tumbles
- IP 67 Rated
- Industry-Leading DPM Decoding Performance with Omron's X-Mode Imaging Technology
- Wired or Wireless Models





Description	Part Number
V450-H, Handheld Reader DPM, Wired	V450-HDS3608-0001
V450-H, Handheld Reader DPM, Wireless	V450-HDS3678-0001
V450-H, Cradle, Charger	12-9000937-01

Cables And Accessories

Description	Model
Battery, Spare, V450-H / HS-360X	98-9000224-01
Power Supply, Cradle, V450-H / HS-360X	98-9000181-01
Power Supply, 4-Slot Battery Charger, V450-H / HS-360X	98-9000182-01
4-Slot Battery Charger, V450-H / HS-360X	98-9000185-01
Stand, Intelligent, V450-H / HS-360X	98-9000186-01
AC Power Cable, 1.8M, Japan, C13 Connector	12-9001046-01
AC Power Cable, 1.8M, UK, C13 Connector	12-9000961-01
AC Power Cable, 1.8M, EU, C13 Connector	12-9000960-01
AC Power Cable, 1.8M, U.S., C13 Connector	12-9000959-01
AC Power Cable, 1.8M, China, C13 Connector	12-9000962-01
Cable, RS232, DB9, Female, 2M, Straight, V450-H / HS-360X	12-9000953-01
Cable, USB, Shielded, 2M, Ext 12V, V450-H / HS-360X	12-9000942-01
Cable, USB, Shielded, 4.6M, Ext 12V, V450-H / HS-360X	12-9000943-01
Cable, USB, Shielded, 2M, V450-H / HS-360X	12-9000946-01
Cable, USB, Shielded, 4.6M, V450-H / HS-360X	12-9000946-01
Cable, Adapter, Omron CS/CJ/NJ PLC	V430-WPLC-2M



V460-H - Handheld Barcode Reader

- All in one rugged industrial handheld barcode reader
- Superior out-of-box performance
- Predictive Auto-focus and Intelligent Lighting
- Hands Free Intelligent Presentation Mode
- Built in PoE with Fieldbus Communications
- Simple PLC integraton with pre-built function blocks
- Rugged design drop-and-tumble rated

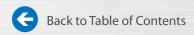




Description	Part Number
V460-H Handheld DPM Reader, PoE Wired, with X-Mode	V460-H0PX

Cables And Accessories

Туре	Length	Part Number
	1 Meter	V430-WE-1M
Ethernet Communication Cables – Straight Connectors M12 Plug on Reader to RJ45 Connector	3 Meters	V430-WE-3M
	5 Meters	V430-WE-5M



V680S - RFID Reader/Writer

- · All in one controller, amplifier, antenna
- Reads and writes to any ISO 18000-3 compliant RFID Tag
- Diagnostic function for easy setup and troubleshoooting
- Ethernet, EtherNet/IP and PROFINET connectivity



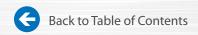


Dimensions (mm)	Network	Model
	EtherNet/IP	V680S-HMD63-EIP
50 x 50 x 30	PROFINET	V680S-HMD63-PNT
	Modbus TCP (TCP/IP)	V680S-HMD63-ETN
	EtherNet/IP	V680S-HMD64-EIP
75 x 75 x 40	PROFINET	V680S-HMD64-PNT
	Modbus TCP (TCP/IP)	V680S-HMD64-ETN
	EtherNet/IP	V680S-HMD66-EIP
120 x 120 x 40	PROFINET	V680S-HMD66-PNT
	Modbus TCP (TCP/IP)	V680S-HMD66-ETN

Tags

Туре	Memory	Dimensions (mm)	Installation	Model
		40 × 40 × 5	For assembly on non-metallic faceted surface	V680S-D2KF67
	2 1/	40 x 40 x 5	For assembly on metallic faceted surface	V680S-D2KF67M
	2 K	86 x 54 x 10	For assembly on non-metallic faceted surface	V680S-D2KF68
No Dottom			For assembly on metallic faceted surface	V680S-D2KF68M
No Battery		40 40 5	For assembly on non-metallic faceted surface	V680S-D8KF67
	0.1/	40 x 40 x 5	For assembly on metallic faceted surface	V680S-D8KF67M
	8 K	86 x 54 x 10	For assembly on non-metallic faceted surface	V680S-D8KF68
			For assembly on metallic faceted surface	V680S-D8KF68M

Note: For tags in other formats, or labels, refer to the Omron website.



V780 - UHF Long Range RFID Reader/Writer

- All-in-one antenna/amplifier/controller with up to 6m of read/write range
- Ability to network up to 7 slave antennas with a master for increased tag reading area
- Web browser based setup and configuration with advanced diagnostics
- Ethernet (Modbus TCP, EtherNet/IP™) as a standard feature







Dimensions (mm)	Network	Applicable countries	Model
	Modbus/TCP base	United States and Canada	V780-HMD68-ETN-US
	(TCP/IP)	Mexico	V780-HMD68-ETN-MX
250 250 70	EtherNet/IP	United States and Canada	V780-HMD68-EIP-US
$250 \times 250 \times 70$		Mexico	V780-HMD68-EIP-MX
	(Slave Reader/Writer for Multi-	United States and Canada	V780-HMD68-ETN-US-S
	Reader/Writer function)	Mexico	V780-HMD68-ETN-MX-S

Cables for V680S and V780

Type of Communication	Length	Power cable	Communication cable		
	2 Meters	V680S-A41 2M*			
V680S Modbus TCP (TCP/IP)	5 Meters	V680S-A41 5M*			
	10 Meters	V680S-A41 10M*			
V780 EtherNet/IP and PROFINET	1 Meter	XS5F-D421-C80-F XS5W-T421-CME-K			
	2 Meters	XS5F-D421-D80-F	XS5W-T421-DMC-K		
V680S EtherNet/IP and PROFINET	5 Meters	XS5F-D421-G80-F	XS5W-T421-GMC-K		
	10 Meters	XS5F-D421-J80-F	XS5W-T421-JMC-K		

Note: * Interface Cable with V680S Special Connector to Flying Leads for Power and RJ45 for Communications



LVS-95XX - Offline Verifier

- Verify 1D, 2D and direct part marks
- Software automatically selects best lighting performance from integrated red or white dome and 30° angle lighting
- Validates printed barcodes to ISO/IEC, ANSI, GS1, and UDI print quality standards







Туре	Field of View	Codes	X-Dimension (min)		Limbium	Power	Communication	Model
	rieid of View		1 D	2 D	Lighting	rowei	Communication	Model
LVS-9510 Desktop	113mm x 85mm	1D & 2D	7.0 mils	9.8 mils	Red (filtered)	12VDC (Supply)		9510-5-45
	76mm x 57mm		5.0 mils	5.9 mils	Red (filtered)	USB Powered	USB 2.0	9580-C-3
LVS-9580 DPM/ LVS-9585 DPM	45mm x 45mm	1D, 2D &		5.9 mils				9580-DPM
	45mm x 45mm	DPM		5.9 mils	Red, White & 30° angle			9585-DPM

V275 - Inline Verifier and Print Quality Inspection

- Inspect 100% of labels for print quality.
- Verify 1D and 2D codes to ISO standards.
- Ensure compliance with regulations and quality requirements.
- Check for cosmetic blemishes and errors in printed data.
- Avoid costly chargebacks, recalls, and supply chain disruption.







Print		Print Speed	Label Width	X-Dimen	-Dimension (min)		Communication	Model	
Туре	Resolution	(max)	(max)	1 D	2 D	(point)	Communication	Model	
V275	300 dpi	304mm (12")/seg	104mm (4.1")				5 pt	V275-P46Z61030-CC	
V275	600 dpi	152mm (6")/seg	104mm (4.1")	6.6 mils 10.0 mils	.0 mils 5 point	nt Ethernet	V275-P46Z61060-CC		
V275	300 dpi	203mm (8")/seg	167mm (6.6")					(via PC)	V275-P86Z62030-CC

Note: 10.0 mils if Code 1D is vertically printed (ladder orientation)



V440-F C-Mount Code Reader

- 5MP global shutter sensor @ 36FPS
- C-Mount lens compatible
- Designed for use with NERLITE Smart Series ring lights
- Power over Ethernet (PoE) or direct 24VDC
- Gigabit Ethernet with locking RJ45 port
- Weblink 3.0 with Enhanced functionality including Matrix Mode and Configuration Database
- IP40-rated







Part Number	Sensor	Optics	Communications	IP Rating	Decode Algorithms
V440-FXXXY50M-NNP	5 MP, Global Shutter, Monochrome	C-Mount	RS232C, Ethernet, EtherNet/IP, PROFINET	IP 40	1D/2D Plus Mode
V440-FXXXY50M-NNX	5 MP, Global Shutter, Monochrome	C-Mount	RS232C, Ethernet, EtherNet/IP, PROFINET	IP 40	1D/2D X-Mode

Note: Lenses, Lights and Cables are selected separately, based on the individual application. Please refer to the V440-F data sheet for all available options.

Mounting Options

Part Number	Description
V440-AM0	1/4-20 Mounting Block for V440-F Reader

NERLITE Smart Series Ring Lights

Part Number	Description
NER-011660900G	R-70, 70mm, Smart Series Ring Light
V440-AM1	R-70 Smart Series Ring Light Mounting Kit
NER-011661100G	R-100, 100mm, Smart Series Ring Light
V440-AM2	R-100 Smart Series Ring Light Mounting Kit

Industrial GigE Ethernet Cable

Part Number	Description	Length
98-000133-01	RJ45 to RJ45, Industrial High Flex GigE Ethernet Cable with Jack Screws	2 Meters
98-000134-01	RJ45 to RJ45, Industrial High Flex GigE Ethernet Cable with Jack Screws	5 Meters
98-000134-02	RJ45 to RJ45, Industrial High Flex GigE Ethernet Cable with Jack Screws	7 Meters

Power & I/O Cable

Part Number	Description	Length
V430-W8-3M	Power & I/O Cable, M12 to Flying Leads Cable, Straight	3 Meters
V430-W8-5M	Power & I/O Cable, M12 to Flying Leads Cable, Straight	5 Meters
61-9000135-01	Y Cable, Reader & Smart Light Power (Continuous On)	1 Meter
61-9000137-01	Y Cable, Reader & Smart Light Power (Strobe Control)	1 Meter





MicroHAWK F430/330 -Smart Camera

- Ultracompact Smart Cameras
- Various model options and configuration possibilities
- Two programming software options: AutoVISION (Simplified) or Visionscape (Complete)
- Autofocus with liquid lens (F420-F and F430-F)
- Degree of protection up to IP67





Product Page



Product Video



Training Services

Family	Sensor Color	Sensor Resolution	Shutter Type	Lens Type/ Mount	Focus Distance	Software or License	Model
	Monochrome	0.34 MP					F320-F102W03M-NNV
	Monochrome	1.2 MP	Global	Integrated -			F320-F102W12M-NNV
	Color	5 MP	Rolling		100		F320-F102W50C-NNV
	Monochrome	0.34 MP		fixed focus	102 mm	AutoVISION + Verification + Visionscape	F330-F102W03M-NNV
F330	Monochrome	1.2 MP	Global				F330-F102W12M-NNV
	Color	5 MP	Rolling				F330-F102W50C-NNV
	Monochrome	1.2 MP	Global		75 to 1200 mm		F420-F000L12M-SRV
	Color	5 MP	Rolling		50 to 300 mm	AutoVISION Sensor	F420-F000M50C-SWS
F420	Monochrome	0.34 MP				AutoVISION + Verification + Visionscape	F420-F000W03M-SRV
	Monochrome	1.2 MP	Global				F420-F000W12M-SRV
	Color	5 MP	Rolling				F420-F000W50C-SWV
	Monochrome	1.2 MP		Autofocus high	75 to 1200 mm		F430-F000L12M-SRV
	Monochrome	1.2 MP					F430-F000M12M-RRV
	Monochrome	1.2 MP		speed liquid lens		AutoVISION + Verification	F430-F000M12M-SRA
	Monochrome	1.2 MP	Global			AutoVISION + Verification + Visionscape	F430-F000M12M-SRV
F430	Monochrome	1.2 MP				AutoVISION + Verification	F430-F000M12M-SWA
	Monochrome	0.34 MP			50 to 300 mm	AutoVISION + Verification + Visionscape	F430-F000W03M-SRV
	Monochrome	1.2 MP				AutoVISION + Verification + Visionscape	F430-F000W12M-SRV
	Color	5 MP				AutoVISION Sensor	F430-F000W50C-SWS
	Color	5 MP	Rolling			AutoVISION + Verification + Visionscape	F430-F000W50C-SWV



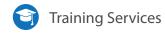
F440 Smart Camera

- 5 MP monochrome global shutter sensor
- Up to 35 FPS image acquisition
- Standard C-Mount lens compatible lens
- Optics & Lighting flexibility to solve complex vision applications
- AutoVISION offers twelve easy to use tools that allow users to setup and star jobs within 3 steps









Appearance	Description	Part Number
	F440-F, No Optics, 5 MP, Mono, No Light, AutoVISION Sensor	F440-FXXXY50M-NNS
	F440-F, No Optics, 5 MP, Mono, No Light, AutoVISION + Verification	F440-FXXXY50M-NNA
Dist	F440-F, No Optics, 5 MP, Mono, No Light, AutoVISION + Verification + Visionscape	F440-FXXXY50M-NNV

Note 1: F440-F cameras are sold without lenses, lights, cables, or mounting. All of these items can be found in later sections of this datasheet. Note 2: The F440-F uses all the same cables and interconnect accessories as the V440-F. The F440-F uses standard Ethernet cables. High-Flex TPE cables and Robot Ethernet cables are shown later in this datasheet.

Software License	Vision Toolset
F440-FXXXY50M-NNS: AutoVISION Sensor	Locate Tool, Presence/Absence Tool, Count Tool, Measure Tool, Logic Tool
F440-FXXXY50M-NNA: AutoVISION + Verification	All of the Above + Decode Tool, OCR Tool, Match Strings Tool, String Format Tool, OCV Tool, Symbol Quality Verification Tool
F440-FXXXY50M-NNV: AutoVISION + Verification + Visionscape	All of the Above + Visionscape Extensive Machine Vision Tool Set



FHV7 - Smart Camera

- Several model options and setting possibilities (from 0.4MP to 12MP)
- Dual-Core CPU providing up to 430 fps (0.4MP) acquisition
- Multicolor lighting module (red, green, blue, and infrared, with individual control)
- Degree of protection up to IP67









Training Services

Family	Sensor Color	Sensor Resolution	Shutter Type	Lens Type/Mount	Software or License	Model
М		0.4 MP				FHV7X-M004-C
		1.6 MP		C Mount with option for autofocus accessory		FHV7X-M016-C
	Monochrome	3.2 MP				FHV7X-M032-C
		5 MP	Clabal	C Mount	FHV Software or Sysmac Studio Software with License	FHV7X-M050-C
		0.4 MP	- Global -	C Mount with option for autofocus accessory		FHV7X-C004-C
		1.6 MP				FHV7X-C016-C
FHV7		3.2 MP				FHV7X-C032-C
	Color	5 MP		C Mount		FHV7X-C050-C
		6.3 MP		C Mount with option for autofocus accessory		FHV7X-C063R-C
N		12 MP		C Mount		FHV7X-C120R-C
		6.3 MP	Rolling	C Mount with option for autofocus accessory	1	FHV7X-M063R-C
	Monochrome	12 MP		C Mount	1	FHV7X-M120R-C

Lenses

Focal Distance	C-Mount	Autofocus (Standard)	Autofocus (High-speed)
6mm	_	FHV-LEM-S06	FHV-LEM-H06
8mm	SV-0814H	_	_
9mm	_	FHV-LEM-S09	_
12mm	SV-1214H	FHV-LEM-S12	_
16mm	SV-1614H	FHV-LEM-S16	_
19mm	_	_	FHV-LEM-H19
25mm	SV-2514H	FHV-LEM-S25	_

Note: For C-Mount lenses, please refer to Vision Accessory Catalog for complete lens setup. Autofocus lenses and Lighting modules will fit on 0.4MP, 1.6MP, 3.2MP and 6.3MP cameras. You can also refer to the FHV7 configurator on the product page.

Lighting Modules

Light Color	Model			
Multicolor	FHV-LTM-MC			
Red	FHV-LTM-R			
White	FHV-LTM-W			
IR	FHV-LTM-IR			

Type	Connector			
Туре	Straight	Right-angle		
Ethernet Cable	FHV-VNB2 _M ¹	FHV-VNLB2 _M ¹		
I/O Cable	FHV-VDB2 _M ¹	FHV-VDLB2 _M ¹		
Data Unit Cable	FHV-VUB2 _M ¹	FHV-VULB2 _M ¹		
I/O Cable for Parallel Interface Data Unit	XW2Z-S0131	_		

Smart Camera Data Unit

Туре	Inputs / Outputs	EtherCAT Communication	Model
Parallel Interface	12 Inputs / 24 Outputs	No	FHV-SDU10
EtherCAT Interface	1 Input / 2 Outputs	Yes (Slave)	FHV-SDU30

^{1.} Replace underscore with cable length in Meters (2, 3, 5, 10, 20). Only lengths 2 and 5 are available for the Parallel Interface Data Unit. Note: Tables include representative part numbers. Please consult the product page for more details.



FH - Vision System

High-speed and standard models include:

- High performance Vision System with AI and more than 100 program tools
- Connection for 2, 4 or 8 cameras on the same controller with independent triggers
- High resolution cameras up to 20 MP
- Real image processing (16 million colors)







Controllers

Item	CPU and Processing	Communication	EtherCAT	No. of cameras	Model
				2	FH-5051
	High-Speed Controller (4 core)			4	FH-5051-10
		EtherNet/IP, EtherCAT, EtherNet TCP/UDP, PROFINET, Serial, Parallel I/O EtherNet/IP, EtherNet TCP/UDP,	Yes	8	FH-5051-20
Box type controller	Standard Controller (2 core)			2	FH-2051
				4	FH-2051-10
				8	FH-2051-20
			No	2	FH-L551
	Lite Controller (2 core)	PROFINET, Serial, Parallel I/O	INO	4	FH-L551-10

Cameras

Itom	Description	Model		
Item	Description	Color	Monochrome	
CMOS Camera	5MP, 71.7ms image acquisition time	FH-SC05R	FH-SM05R	
(Rolling Shutter)	20.4MP, 42.6ms image acquisition time	FH-SC21R	FH-SM21R	
	12MP, 24.9ms image acquisition time1	FH-SCX12	FH-SMX12	
Never high are ad CMOS Comme	5MP, 10.3ms image acquisition time ¹	FH-SCX05	FH-SMX05	
Newer high speed CMOS Camera (Global Shutter)	3.2MP, 6.6ms image acquisition time ¹	FH-SCX03	FH-SMX03	
(Global Strutter)	1.6MP, 6.5ms image acquisition time	FH-SCX01	FH-SMX01	
	0.4MP, 1.9ms image acquisition time	FH-SCX	FH-SMX	
LII L LCMOS C	M42 Mount 12MP, 25.7ms image acq time ¹	FH-SC12	FH-SM12	
High speed CMOS Camera (Global Shutter)	4MP, 8.5ms image acquisition time ¹	FH-SC04	FH-SM04	
(Global Shutter)	2MP, 4.6ms image acquisition time1	FH-SC02	FH-SM02	
Integrated CMOS Camera (Global Shutter)	0.3MP, 16.7ms image acquisition time	FZ-SQ100N	_	

1. Frame rate in high speed mode when the camera is connected using two camera cables.

Туре	Description	Model
	2m Length	FZ-VS3 2M
Cable for camera	5m Length	FZ-VS3 5M
	10m Length	FZ-VS3 10M
Parallel cable for I/Os	2m Length	XW2Z-S013-2
	5m Length	XW2Z-S013-5

Type of Camera	rocal Distance	Model
FH-S X01	6mm	SV-0614H
FH-S_X03	8mm	SV-0814H
FH-S_X05	12mm	SV-1214H
FH-S_05R (1.6MP to 5MP)	16mm	SV-1614H
	25mm	SV-2514H
	6mm	SV-0614V
FILC V	8mm	SV-0813V
FH-S_X (0.4MP)	12mm	SV-1214V
	16mm	SV-1614V
	25mm	SV-2514V

Note: Tables include representative part numbers. Please consult the product page for more details.

Note: Please refer to Vision Accessory Catalog for complete lens setup.



M Series GigE Vision Cameras

- Power over Ethernet capable
- High Resolution, High Speed, CMOS Sensors.
- Small Form Factor: 29 x 29mm & 30 x 40mm versions.
- IEEE1588 Certified with GigE Vision 2.1
- Compatible with Omron AutoVISION & VisionScape







Training Services

Global shutter models

Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	Model
Monochrome	0.4M	202 0 fps	720 × 540	1/2.9	6.9 × 6.9	IMX287	С	STC-MBS43POE
Color	0.4101	4M 282.8 fps 720×54	720 X 340	1/2.9	0.9 × 0.9	IIVIA207	C	STC-MCS43POE
Monochrome	OEM	166.5 fps	816 × 624	1/1.7	9×9	IMX433	С	STC-MBS52POE
Color	0.5M	100.5 108	010 X 024	1/1./		IIVIA433		STC-MCS52POE
Monochrome	1 214	C1 fra a	1200 × 1024	1/1.8	F 2 × F 2	5.3 × 5.3 EV76C560	6	STC-MBE132POE
Color	1.3M	61 fps	1280 × 1024	1/1.8	5.5 × 5.5		С	STC-MCE132POE
Monochrome	1.6M	70.7 fps	1440 × 1088	1/2.9	3.45 × 3.45	IMX273	С	STC-MBS163POE
Color	1.0101	70.7 lps	1440 X 1000	1/2.9	3.43 X 3.43	.43 \ 3.43 IIVI\\\ 273	C	STC-MCS163POE
Monochrome	2M	54.6 fps	1624 × 1240	1/1.7	4.5 × 4.5 IMX430	С	STC-MBS202POE	
Color	2101	34.0 lps 1024 × 1240 1/1.7 4.5 × 4.5	4.5 X 4.5	11017430	C	STC-MCS202POE		
Monochrome	2.3M	41.6 fps	1920 × 1200	1/1.2	5.86 × 5.86	IMV240	_	STC-MBS231POE
Color	2.5101	41.0 lps	1920 X 1200	1/1.2	3.00 × 3.00	× 5.86 IMX249	С	STC-MCS231POE
Monochrome	2 214	34.9 fps	2048 × 2048	2/3	3.45 × 3.45	IMX265	C	STC-MBS312POE
Color	3.2M	54.9 lps	2046 X 2046	2/3	3.43 X 3.43	IIVIAZOS	С	STC-MCS312POE
Monochrome	EM	21.0 fps	2449 × 2049	2/2	2/2 2.45 2.45 IMAY26	IMX264	C	STC-MBS500POE
Color	5M	1 21.9 fps 2448 × 2048 2/3 3.45 × 3.45	3.45 × 3.45	11/13/204	С	STC-MCS500POE		
Monochrome	0.014	.9M 12.4 fps 4096 × 2160 1 3.45 × 3.45	2.45 \ 2.45	IMAYOCZ	С	STC-MBS881POE		
Color	8.9101		3.45 × 3.45	IMX267		STC-MCS881POE		
Monochrome	12.214	0.06	4006 × 2000	1 1	2.45 × 2.45	IMX255	С	STC-MBS122BPOE
Color	12.3M	.3M 8.9 fps 4096 × 3000 1.1 3.45 × 3.45	3.43 × 3.45	.45	C	STC-MCS122BPOE		

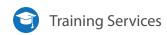


M Series GigE Vision Cameras (continued)

- Power over Ethernet capable
- High Resolution, High Speed, CMOS Sensors.
- Small Form Factor: 29 x 29mm & 30 x 40mm versions.
- IEEE1588 Certified with GigE Vision 2.1
- Compatible with Omron AutoVISION & VisionScape







Rolling shutter models

Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	Model		
Monochrome	5M	1.4 fpc	2592 × 1944	1/2 5	2.2 × 2.2	MT9P031	C	STC-MBA503POE		
Color	3101	1 14 fps 2592×1944 1/2.5 2.2×2.2 1	WITSPUST	C	STC-MCA503POE					
Monochrome	6.4M	17.4 fps	2072 \ 2049	1/1.8	2.4 × 2.4	IMX178	_	STC-MBS642POE		
Color		M 17.4 fps 3072 × 2048 1/1.8 2.4 × 2.4	IIVIA I 70	C	STC-MCS642POE					
Monochrome	10M	10.3 fps	3856 × 2764	1/2.3	1.67 × 1.67	MT9J003	С	STC-MBA1002POE		
Monochrome	12M	1214	1214	0.2 fms	4000 × 3000	1/1.7	1.85 × 1.85	IMAYOO	6	STC-MBS1242POE
Color		$2M$ 9.2 fps 4000×3000 $1/1.7$ $1.85 \times$	1.85 X 1.85	IMX226		STC-MCS1242POE				
Monochrome	20.4M 5.5 fps 5472 × 3648 1 2.4 × 2.4	20.4M	24×24	IMV102		STC-MBS2041POE				
Color		2.4 × 2.4	IMX183	C	STC-MCS2041POE					

Screw-Fastened GigE Cables

Length	Model
3 m	FJ-VSG 3M
5 m	FJ-VSG 5M
10 m	FJ-VSG 10M
20 m	FJ-VSG 20M
40 m	FJ-VSG 40M

Power Supply and I/O Cables

Length	Model
3 m	FJ-VSP2 3M
5 m	FJ-VSP2 5M
10 m	FJ-VSP2 10M

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.



FS Series GigE Vision Line Scan Cameras

- Power over Ethernet capable
- Compact case designed for easy mounting
- Offered in 2K, 4K, or 8K
- Available in Single & Dual Line Monochrome and Dual Line Color Models.
- Action Command Triggering: Trigger multiple cameras simultaneously with one command.







Monochrome/Color	Resolution	Line Rate	Pixel size	Sensor	Sensor Type	Lens Mount	Model
						С	FS-B2KU7GES-C
Monochrome	2048 × 1	51 kHz	7 μm	DR-2K-7	Single	F	FS-B2KU7GES-F
						M42	FS-B2KU7GES-M42
Monochrome	4096 × 1	26 kHz	7	DR-4K-7	Cin ala	F	FS-B4KU7GES-F
Monochrome	4096 X I	20 KHZ	7 μm	DR-4K-7	Single	M42	FS-B4KU7GES-M42
						С	FS-B4KU35GES-C
Monochrome	4096 × 1	26 kHz	3.5 μm	DR-4K-3.5	Single	F	FS-B4KU35GES-F
			M42	FS-B4KU35GES-M42			
Monochrome	nochrome 8192 × 1	13 kHz	3.5 μm	DR-8K-3.5	Single	F	FS-B8KU35GES-F
Monochrome	0192 X I	15 KHZ				M42	FS-B8KU35GES-M42
			7 μm	DR-2X2K-7-inver	Dual	С	FS-B2KU7DGES-C
Monochrome	2048x1	26kHz				F	FS-B2KU7DGES-F
						M42	FS-B2KU7DGES-M42
Monochrome	4096x2	13kHz	7.1100	DR-2X4K-7-inver	Dual	F	FS-B4KU7DGES-F
Monochrome	4090X2	ISKIIZ	7 μm	DR-2X4R-7-IIIVEI	Duai	M42	FS-B4KU7DGES-M42
						С	FS-C2KU7DGES-C
Color	2048x1	3x1 26kHz	7 μm	DR-2X2K-7-inver-RGB	Dual	F	FS-C2KU7DGES-F
						M42	FS-C2KU7DGES-M42
Color	4096x2			DD 27/41/ 7 : 200	5 1	F	FS-C4KU7DGES-F
COIOI	409082	13kHz	7 μm	DR-2X4K-7-inver-RGB	Dual	M42	FS-C4KU7DGES-M42

Screw-Fastened GigE Cables

Length	Model
3 m	FJ-VSG 3M
5 m	FJ-VSG 5M
10 m	FJ-VSG 10M
20 m	FJ-VSG 20M
40 m	FJ-VSG 40M

Power Supply and I/O Cables

Length	Model
3 m	FJ-VSP2 3M
5 m	FJ-VSP2 5M
10 m	FJ-VSP2 10M

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.



1080p HD Output

- True HD 1080p Resolution at 60 FPS
- Easily programmable user profiles
- Optional Wired Remote Control for on-the-fly changes





Product Page



Training Services

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (HxV)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	General Specifications
STC-HD213DV	Calan	10000/1000:	CO for	1020,000	1/2.0	2.9x2.9	IMX291	С	\\/;th \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
STC-HD213DV-CS	Color	1080P/1080i	60 fps	1920x080	1/2.9	2.9x2.9	IIVIX 29 I	CS	With Memory
STC-HD213DVN								С	
STC-HD213DVN-B	Color	1080P/1080i	60 fps	1920x1080	1/2.9	2.9x2.9		С	No Memory
STC-HD213DVN-CS								CS	
STC-HD213SDI	Calar	10000/1000:	co for	1020,000	1/2.0	20.20	IMV201	С	\\/:th \\
STC-HD213SDI-CS	Color	1080P/1080i	60 fps	1920x080	1/2.9	2.9X2.9	2.9x2.9 IMX291	CS	With Memory
STC-HD213SDIN								С	
STC-HD213SDIN-B	Color	1080P/1080i	60 fps	1920x1080	1/2.9	2.9x2.9		С	No Memory
STC-HD213SDIN-CS								CS	

Туре	Model	Applicable Model	General Specifications		
Mount Conversion Adapter	CS-C-R	CS Mount Series	—		
Remote Control Unit	JIG-HD133-R	HDMI/DVI/SDI	Ø3.5 stereo pin jack		
Туре	Model	Description			
	CAB-HDMI-015	4K HDMI Cable; 1.5m			
	CAB-HDMI-02	4K HDMI Cable; 2m			
	CAB-HDMI-03	4K HDMI Cable; 3m			
	CAB-HDMI-05	4K HDMI Cable; 5m			
Cables	CAB-HDMI-100-OPT	4K HDMI Cable; 100m; Power			
Cables	CAB-HDMI-10-OPT	4K HDMI Cable; 10m; P	ower		
	CAB-HDMI-20-OPT	4K HDMI Cable; 20m; P	ower		
	CAB-HDMI-30-OPT	4K HDMI Cable; 30m; P	ower		
	CAB-HDMI-50-OPT	4K HDMI Cable; 50m; P	ower		
	CAB-HDMI-70-OPT	4K HDMI Cable; 70m; Power			
Power	PWR-DC12-500R-A	Int/Dom Version of DC	12		



M Series USB3 Vision Cameras

- USB3.0 Compact CMOS Camera
- Offered in resolutions ranging from 0.4M to 20.4M
- Plug and Play functionality
- Compatible with Omron AutoVISION & VisionScape.







Training Services

Global shutter models

Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	Model
Monochrome	0.4M	527.1 fps	720 × 540	1/2.9	6.9 × 6.9	IMX287	С	STC-MBS43U3V
Color	0.4101	527.1 Ips	720 X 340	1/2.9	0.9 × 0.9	IIVIAZ67		STC-MCS43U3V
Monochrome	1.3M	60 fps	1280 × 1024	1/1.8	5.3 × 5.3	EV76C560	CS	STC-MBE132U3V
Color	1.5101	60 lbs	1200 X 1024	1/1.0	3.3 X 3.3	EV/6C360	CS	STC-MCE132U3V
Monochrome	1.6M	238 fps	1440 × 1080	1/2.9	3.45 × 3.45	IMX273	С	STC-MBS163U3V
Color	1.0101	236 lps	1440 × 1060	1/2.9	3.43 × 3.43	IIVIAZ73		STC-MCS163U3V
Monochrome	2M	167 fps	2048 × 1088	2/3	5.5 × 5.5	CMV2000	С	STC-MBCM200U3V
Monochrome NIR	ZIVI	107 105	2046 X 1000	2/3	3.3 X 3.3	CIVIV2000		STC-MBCM200U3V-NIR
Monochrome	2.3M	41.6 fps	1920 × 1200	1/1.2	5.86 × 5.86	IMX249	С	STC-MBS231U3V
Color	2.5101	41.0105	1920 X 1200	1/1.2	3.00 X 3.00	IIVIA249		STC-MCS231U3V
Monochrome	2.3M	163 fps	1920 × 1200	1/1.2	5.86 × 5.86	IMX174	С	STC-MBS241U3V
Color	2.3101	103 105	1920 × 1200	1/1.2	3.80 × 3.80	IIVIX 174		STC-MCS241U3V
Monochrome	3.2M	56 fps	2048 × 1536	1/1.8	3.45 × 3.45	IMX265	С	STC-MBS312U3V
Color	3.2101	30 lbs	2046 X 1550	1/1.0	3.43 X 3.43	IIVIAZOS		STC-MCS312U3V
Monochrome	3.2M	121 fps	2048 × 1536	1/1.8	3.45 × 3.45	IMX252	С	STC-MBS322U3V
Color	3.2101	121 105	2046 X 1330	1/1.0				STC-MCS322U3V
Monochrome		89 fps	2048 × 2048	1	5.5 × 5.5	CMV4000	С	STC-MBCM401U3V
Color	4M							STC-MCCM401U3V
Monochrome NIR								STC-MBCM401U3V-NIR
Monochrome	5M	35.8 fps	2448 × 2048	2/3	3.45 × 3.45	IMX264	С	STC-MBS500U3V
Color	JIVI	33.0 ips	2440 \ 2040	2/3	3.43 \ 3.43	IIVIX204		STC-MCS500U3V
Monochrome	5M	75.7 fps	2448 × 2048	2/3	3.45 × 3.45	IMX250	С	STC-MBS510U3V
Color	JIVI	75.7 Ips	2440 \ 2040	2/3	J1J \ J1J	IIVIX230	_	STC-MCS510U3V
Monochrome	7.1M	51.2 fps	3216×2208	1.1	4.5 × 4.5	IMX428	c	STC-MBS70BU3V
Color	7.1101	31.2103	3210 × 2200	1.1	4.5 \ 4.5	IIVIX420	_	STC-MCS70BU3V
Monochrome	8.9M	32.5 fps	4096 × 2160	1	3.45 × 3.45	IMX267	С	STC-MBS881U3V
Color	0.9101	32.3 103	4090 \ 2100	'	J1J \ J1J	IWIX207	_	STC-MCS881U3V
Monochrome	- 8.9M 41.9 fps	/1 0 fps	4096 × 2160	1	3.45 × 3.45	IMX255	c	STC-MBS891U3V
Color		41.5103	4096 X 2160	'	3.43 \ 3.43	IIVIX233		STC-MCS891U3V
Monochrome	12.3M	23.5 fps	4096 × 3000	1.1	3.45 × 3.45	IMX304	С	STC-MBS122BU3V
Color	12.311	23.3 103	4090 × 3000	1.1	J.7J ^ J.7J	IIVIX3U4		STC-MCS122BU3V
Monochrome	12.3M	30.4 fps	4096 × 3000	1.1	3.45 × 3.45	IMY253		STC-MBS123BU3V
Color	12,3111	50.4 ibs	4070 X 3000	1.1	3.45 × 3.45	IMX253	С	STC-MCS123BU3V

Note. We recommend that you use an external power supply for 8.9M and 12M cameras, for depending on PC performance, power supplied via USB bus connection alone may not be sufficient for these cameras.

Note. Models with "-SE" have been additionally equipped with the Short Exposure Mode feature.

Rolling shutter models

Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	Model
Monochrome	1214	31.2 fps	4000 × 3000	1/1.7	1.85 × 1.85	IMX226	С	STC-MBS1242U3V
Color	12M							STC-MCS1242U3V
Monochrome	20.4M	444 10.55	5472 × 3648	1	24424	IMX183		STC-MBS2041U3V
Color	20.4M 18.5 fps	34/2 X 3040	'	2.4 × 2.4	IIVIX 183		STC-MCS2041U3V	

Non-USB3 Vision Compliant Models (with Rolling Shutters)

Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	Model
Monochrome	- 5M 14 fps	146	2502 4044	1/2 5	22×22	MT0D024		STC-MBA5MUSB3
Color		2592 × 1944	1/2.5	2.2 × 2.2	MT9P031	CS	STC-MCA5MUSB3	



Short Wave Infrared Industrial Camera Series

- Top of the line, high-end sensors
- Unique Interfaces for Customizability
- One-of-a-kind Heat dissipation technology
- Removes environmental dependency and variability
- SWIR technology allows inspection throughout the full manufacturing process, even under plastic wrap or silicon coating.







Part Number	Interface	Resolution	Frame Rate	Sensor Size
STC-LBS34POE-SWIR	GigE Vision	0.3 MP	242 FPS	1/4"
STC-LBS132POE-SWIR	GigE Vision	1.3 MP	84 FPS	1/2"
STC-LBS34U3V-SWIR	USB3 Vision	0.3 MP	260 FPS	1/4"
STC-LBS132U3V-SWIR	USB3 Vision	1.3 MP	134 FPS	1/2"
STC-LBS34CL-SWIR	Camera Link	0.3 MP	258 FPS	1/4"
STC-LBS132CL-SWIR	Camera Link	1.3 MP	125 FPS	1/2"

Note: Tables include representative part numbers. Bold models: Preferred Availability. Please consult the product page for more details.



Factory Drive Recorder

The Omron Factory Drive Recorder offers users the ability to optimize their machine troubleshooting and minimize the time it takes to solve problems in the field through the combination of Omron Industrial Cameras and the easiest to use Event Capture Software on the market.



- · Record the Moment
 - Record up to 5 minutes of video before an event trigger and 5 minutes of video after an even trigger
- 4 Trigger Options
 - Master Image Comparison
 - Motion Trigger
 - Time Trigger
 - Trigger Signal (via Hardware Trigger)

- · Live Monitoring & Manual Viewing
- Connect up to 8 Omron Industrial Cameras to the Software allowing for multiple camera recordings.
- · High Speed & High Quality Recording
 - Omron Industrial Cameras feature Frame Rates up to 527 FPS & Resolutions up to 20 MP

Part Number	Description
STC-FDRSW-01	Omron's New Event Capture Software; Factory Drive Recorder

Related Products

Model No.	Product Family	Description	
	M Series GigE Vision Cameras	GigE Vision Industrial Cameras – Area Scan Cased	
	M Series USB3 Vision Cameras	USB3 Vision Industrial Cameras – Area Scan Cased	
Industrial Camera	B Series GigE Vision Cameras	GigE Vision Industrial Cameras – Area Scan Board	
	UVC Cameras	UVC Industrial Cameras – Multiple Configurations	
	R Series USB3 Vision Remote Head	USB3 Vision Remote Head	

Note: Tables include representative part numbers. Bold models: Preferred Availability. Please consult the product page for more details.



G9SP - Safety Controller

- The standalone safety controller for small and mid-sized applications.
- Communication with standard PLC via Ethernet or Serial
- Direct communication with HMI NB Series via Serial
- Four types of standard expansion







Product	Inputs	Test outputs	Safety outputs	Common outputs	Model
G9SP Series	10	4	Transistar Outrout 4	4	G9SP-N10S
	10	6	Transistor Output: 4	-	G9SP-N10D
	20	6	Transistor Output: 8	-	G9SP-N20S

Expansion Modules and Accessories

Description	No. of Outputs	No. of Inputs	Model
	8 (NPN)	12 (NPN)	CP1W-20EDT
Function Modules	8 (PNP)	12 (PNP)	CP1W-20EDT1
Expansion Modules	32 (NPN)		CP1W-32ET
	32 (PNP)		CP1W-32ET1
Connection Cable	80cm (for connecting distant units)		CP1W-CN811
	RS-232 S	CP1W-CIF01	
Communication Modules	EtherNet/	CP1W-CIF41	
	EtherNe	CM-EIP-1	
Programming software	1 license		WS02-G9SP01-V1
Cassette Memory		CP1W-ME05M	



NX-SL5 - Safety Controller

- A versatile safety controller, with EtherCAT and EtherNet/IP capabilities, for integrated or stand-alone solutions, making machine safety design, installation, and maintenance easier
- Enable flexible manufacture by supporting different safety networks, CIP Safety and FSoE. Enable a hybrid system, when combining the NX-SL5 with the NX-102.
- Sysmac Studio offers a set of unique functions to make functional safety management easier as Safety Signature Check and Online Function Verification. In addition, reduce the design cycle with automatic programming and simple automatic test.





Product Page



Product Video



Training Services



Safety Services

Product	Description	Model
NX-SL5 Safety Controller Units	Safety PLC, up to 1024 safety I/O and 128 safety connections	NX-SL5500
	Safety PLC, up to 2032 safety I/O and 254 safety connections	NX-SL5700

Product	Туре	Protocol	Am. of Ports	Number of Networks	Safety Inputs	Safety Outputs	Test Outputs	Model
Communication	Network Coupler	EtherNet/IP	3	2				NX-CSG320
	Remote Module of	EthouNot/ID	2	1	12	4	12	GI-SMD1624
	safety I/Os	EtherNet/IP			12	-	12	GI-SID1224

Product	Туре	No. of Points	f Points Description I	
Safety Input & Output Units Output	lam.it	4	4 safety input points (PNP) with 2 test outputs	NX-SIH400 Ver 1.1
	Input	8	8 8 safety input points (PNP) with 2 test outputs	
	0	2	2 safety outputs (PNP)	NX-SOH200
	Output	4	4 safety outputs (PNP)	NX-SOD400



NX-SL3 - Safety Controller

- Effortless integration into the most common PLC's platforms in the market, providing reliable safety solutions while supporting different configurations.
- Offer a direct connection to any PLC using an EtherNet/ IP coupler, and build a stand-alone system. For larger projects, with a higher number of safety devices distributed over a larger area, using an EtherCAT coupler supports EtherCAT and FSoE.
- Sysmac Studio offers a set of unique functions to make functional safety management easier as Safety Signature Check and Online Function Verification. In addition, reduce the design cycle with automatic programming and simple automatic test.









Product	Туре	Model
NX-SL3 Safety Controller Units	Safety PLC, up to 256 safety I/O and 32 safety connections *	NX-SL3300 Ver 1.1
	Safety PLC, up 1024 safety I/O and 128 safety connections *	NX-SL3500 Ver 1.1

^{*} Only FSoE master connections supported

Product	Туре	No. of Points	Description	Model
Safety Input & Output Units Output	lament	4	4 safety input points (PNP) with 2 test outputs	NX-SIH400 Ver 1.1
	input	8 8 safety input points (PNP) with 2 test outputs		NX-SID800
	Outroot	2	2 safety outputs (PNP)	NX-SOH200
	Output	4	4 safety outputs (PNP)	NX-SOD400

Product	Communication Cycle	Protocol	Maximum number of NX I/O modules	Maximum Current I/O	Model
,	250 to 4 000 us		63	4A	NX-ECC201
	230 to 4,000 us	EtherCAT Slave			NX-ECC202
	125 to 10,000 us			10A	NX-ECC203
	4 to 1,000 us	EtherNet/IP Slave			NX-EIC202



F3SG-SR - Machine Guard Safety Light Curtain

- Three-color Area Beam Indicators (ABIs) enable easy alignment and quick troubleshooting
- Up to 30m protection range (25mm resolution and up)
- IO-Link communication capability helps improve preventive maintenance programs
- Advanced programming features (muting, blanking, prereset, warning zone, etc.) are available on all models.



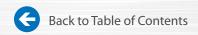


Product Page





ıtion	Protective Height (mm)	Area Beam Indicators	Part Number
	160		F3SG-4SRB0160-14
	320		F3SG-4SRB0320-14
	400		F3SG-4SRB0400-14
1.4	480		F3SG-4SRB0480-14
14 mm	560		F3SG-4SRB0560-14
	640		F3SG-4SRB0640-14
	720		F3SG-4SRB0720-14-F
	1200		F3SG-4SRB1200-14
	360		F3SG-4SRB0360-25-F
	440		F3SG-4SRB0440-25-F
	600	No	F3SG-4SRB0600-25-F
	680		F3SG-4SRB0680-25-F
	760		F3SG-4SRB0760-25-F
	840		F3SG-4SRB0840-25-F
25 mm	920		F3SG-4SRB0920-25-F
	1000		F3SG-4SRB1000-25-F
	1200		F3SG-4SRB1200-25
	1440		F3SG-4SRB1440-25
	1520		F3SG-4SRB1520-25
	1600		F3SG-4SRB1600-25
	1840		F3SG-4SRB1840-25
	400		F3SG-4SRA0400-14
	560		F3SG-4SRA0560-14
14 mm	720		F3SG-4SRA0720-14-F
	880		F3SG-4SRA0880-14-F
	1200		F3SG-4SRA1200-14
	280		F3SG-4SRA0280-25-F
	440	Yes	F3SG-4SRA0440-25-F
	600		F3SG-4SRA0600-25-F
25	760		F3SG-4SRA0760-25-F
25 mm	920		F3SG-4SRA0920-25-F
	1200		F3SG-4SRA1200-25
	1600		F3SG-4SRA1600-25
bles include representat	ive part numbers. મુકૃતુક consult the pro	duct page for more details.	F3SG-4SRA1760-25

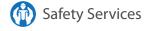


F3SG-PG - Perimeter Guard Safety Light Curtain

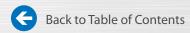
- Three-color Area Beam Indicators (ABIs) enable easy alignment and quick troubleshooting.
- Protection distance up to 110m
- Robust design for harsh environments (rated IP67G)
- IO-Link communication for remote monitoring







Number of Beams	Beam Gap (mm)	Product Length (mm)	Protection Range (m)	Туре	Part Number
	500	670	up to 30m	Emitter/Receiver	F3SG-4PGA0670-2A
2	500	670	up to 8m	Transceiver	F3SG-4PGA0670-2C
	500	670	up to 110m	Emitter/Receiver	F3SG-4PGA0670-2L
2	400	970	up to 30m	Emitter/Receiver	F3SG-4PGA0970-3A
3	400	970	up to 110m	Emitter/Receiver	F3SG-4PGA0970-3L
	300	1070	up to 30m	Emitter/Receiver	F3SG-4PGA1070-4A
	300	1070	up to 8m	Transceiver	F3SG-4PGA1070-4C
4	300	1070	up to 110m	Emitter/Receiver	F3SG-4PGA1070-4L
4	400	1370	up to 30m	Emitter/Receiver	F3SG-4PGA1370-4A
	400	1370	up to 8m	Transceiver	F3SG-4PGA1370-4C
	400	1370	up to 110m	Emitter/Receiver	F3SG-4PGA1370-4L



Safety Light Curtain Accessories and Cables

F3SG-SR/PG Brackets

Description	Part Number
Standard Bracket (non-adjustable)	F39-LSGF
Adjustable Side-Mount Bracket	F39-LSGA
Adjustable Top/Bottom Bracket (F3SJ, F3SN Adaptor)	F39-LSGTB-SJ
Adjustable Top/Bottom Bracket (F3SG-RA/RE Adaptor)	F39-LSGTB-RE
Adjustable Top/Bottom Bracket (MS4800, F3SR Adaptor)	F39-LSGTB-MS

F3SG-SR/PG Root Cables (plug into light curtain)

Description	Length	Emitter Part Number	Receiver Part Number
Root Cable to M12 connector (Standard)	0.3 m	F39-JGR3K-L	F39-JGR3K-D
Root Cable to Flying Leads	3m	F39-JG3C-L	F39-JG3C-D
Root Cable to Flying Leads	7m	F39-JG7C-L	F39-JG7C-D
Root Cable to Flying Leads	10m	F39-JG10C-L	F39-JG10C-D
Root Cable to M12 Connector (F3SJ-B/A, F3SR, or F3SN Conversion)	0.3 m	F39-JGR3K-SJ-L	F39-JGR3K-SJ-D
Root Cable to M12 Connector (F3SG-RE Conversion)	0.3 m	F39-JGR3K-RE-L	F39-JGR3K-RE-D
Root Cable to M12 Connector (MS4800 Conversion)	0.3 m	F39-JGR3K-MS-L	F39-JGR3K-MS-D

F3SG-SR/PG Extension Cables (plug into M12 Root Cable)

Description	Length	Emitter Part Number	Receiver Part Number
M12 to Flying Lead Extension Cable	3 m	F39-JG3A-L	F39-JG3A-D
M12 to Flying Lead Extension Cable	10 m	F39-JG10A-L	F39-JG10A-D
M12 to M12 Extension Cable	3 m	F39-JG3B-L	F39-JG3B-D
M12 to M12 Extension Cable	10 m	F39-JG10B-L	F39-JG10B-D
M12 to M12 Extension Cable	20 m	F39-JG20B-L	F39-JG20B-D



Safety Light Curtain Accessories and Cables

F3SG-SR Cascade Cables

Description	Length	Part Number
Side-by-Side Cascading Cable (2 cables per part number)	0.12 m	F39-JGR12L
Extension Cable for Cascading (2 cables per part number)	0.3 m	F39-JGR3W

F3SG-SR/PG IO-Link Cables

Description	Length	Part Number
NX-ILM400 IO-Link Cable	2 m	XS5F-D521-DJ0-IL
GX-ILM08C IO-Link Cable	3 m	F39-JG3B-L
GX-ILM08C IO-Link Cable	10 m	F39-JG10B-L
GX-ILM08C IO-Link Cable	20 m	F39-JG20B-L

F3SG-SR/PG Wiring Reduction and Reset Cables

Description	Length	Part Number
Y-Joint Plug/Socket Connector	0.5 m	F39-GCNY2
Reset Switch Connector	0.5 m	F39-GCNY3
Reset Switch Connector to Reset Switch Cable	1 m	X5SF-D421-C80-F
Reset Switch Connector to Reset Switch Cable	2 m	X5SF-D421-D80-F
Reset Switch Connector to Reset Switch Cable	3 m	X5SF-D421-E80-F
Reset Switch Connector to Reset Switch Cable	5 m	X5SF-D421-G80-F
Reset Switch Connector to Reset Switch Cable	10 m	X5SF-D421-J80-F
Reset Switch Connector to Reset Switch Cable	20 m	X5SF-D421-L80-F



F3SG-SR/PG Accessories

F3SG-SR, F3SG-PG, and F3SG-R[] Floor Mount Columns

Applicable F3SG-SR/F3SG-R[] Light Curtain	Applicable F3SG-PG Light Curtain	Column Height	Part Number
Protective Height up to 880 mm	F3SG-4PGA0670-2[]	990 mm	F39-ST0990
Protective Height up to 1280 mm	F3SG-4PGA0970-3A/3L F3SG-4PGA1070-4[]	1310 mm	F39-ST1310
Protective Height up to 1520 mm	F3SG-4PGA1370-4[]	1630 mm	F39-ST1630
Protective Height up to 1840 mm		1950 mm	F39-ST1950
Protective Height up to 2080 mm		2270 mm	F39-ST2270

F3SG-SR, F3SG-PG, and F3SG-R[] Mirror Columns

Applicable F3SG-SR/F3SG-R[] Light Curtain	Applicable F3SG-PG Light Curtain	Column Height	Part Number
Protective Height up to 880 mm	F3SG-4PGA0670-2[]	990 mm	F39-SML0990
Protective Height up to 1200 mm	F3SG-4PGA0970-3A/3L F3SG-4PGA1070-4[]	1310 mm	F39-SML1310
Protective Height up to 1520 mm	F3SG-4PGA1370-4[]	1630 mm	F39-SML1630
Protective Height up to 1840 mm		1950 mm	F39-SML1950
	F3SG-4PGA0670-2A/2L	990 mm	F39-PML0990-2
	F3SG-4PGA0970-3A/3L	1310 mm	F39-PML1310-3
	F3SG-4PGA1070-4A/4L	1310 mm	F39-PML1310-4
	F3SG-4PGA1370-4A/4L	1950 mm	F39-PML1630-4

Stand and Mirror Base Accessory

Description	Part Number
Adjustable and Rotatable Column E	se F39-STB

F3SG-SR and F3SG-PG Muting Accessories

Description	Length	Part Number
Through Beam Muting Sensor Mounting Arm	150 mm	F39-FMA150T
Through Beam Muting Sensor Mounting Arm	400 mm	F39-FMA400T
Retro-Reflective Muting Sensor Mounting Arm	150 mm	F39-FMA150R
Retro-Reflective Muting Sensor Mounting Arm	400 mm	F39-FMA400R
Muting Arm Bracket for F3SG-SR/PG Mounting	n/a	F39-LMAF1
Muting Sensor Connection Box	n/a	F39-GCN5



F3SG-RE - Economic Model

- Simple on/off functionality with easy wiring
- 5ms response time
- IP67 Rated
- Resolutions of 14 and 30mm







Resolution	Protective Height (mm)	Part Number
	160	F3SG-4RE0160P14
	240	F3SG-4RE0240P14
	320	F3SG-4RE0320P14
14 mm	560	F3SG-4RE0560P14
	640	F3SG-4RE0640P14
	960	F3SG-4RE0960P14
	1200	F3SG-4RE1200P14
	350	F3SG-4RE0350P30
	430	F3SG-4RE0430P30
	590	F3SG-4RE0590P30
20	750	F3SG-4RE0750P30
30 mm	910	F3SG-4RE0910P30
	1070	F3SG-4RE1070P30
	1230	F3SG-4RE1230P30
	1550	F3SG-4RE1550P30

Cables

Material	Length	Model
	2m	XS2F-M12PVC4S2M
PVC Cable	5m	XS2F-M12PVC4S5M
	10m	XS2F-M12PVC4S10M
	2m	XS2F-M12PUR4S2M
PUR Cable	5m	XS2F-M12PUR4S5M
	10m	XS2F-M12PUR4S10M
Connection cable in 'Y" between Sender and Receiver	0.5m	F39-GCNY1

Accessories (for Advanced and Economic models)

Туре	Description	Model
Fixed Mounting Bracket	Side fivation (2 supports per sade)	F39-LGF
(Already included)	Side fixation (2 supports per code)	F39-LGA
Adjustable Mounting Bracket	Tour freetier (A course outs as as de)	F39-LGTB
(Optional)	Top fixation (4 supports per code)	F39-LGTB-1



OS32C - Safety Laser Scanner

- 4m maximum safety zone and 15m warning zone
- Up to 70 different detection zones configurations
- Distance measurement capabilities up to 50m
- 5W power consumption







Cable Outlet	Safety Range	Ethernet/IP Data	Part Number
	3m	No	OS32C-BP
Deel	4m	No	OS32C-BP-4M
Back	3m	Yes	OS32C-BP-DM
	4m	Yes	OS32C-BP-DM-4M
Side	3m	No	OS32C-SP1
	4m	No	OS32C-SP1-4M
	3m	Yes	OS32C-SP1-DM
	4m	Yes	OS32C-SP1-DM-4M

OS32C Safety Laser Scanner Cables

Description	Length	Part Number
	3 m	OS32C-CBL-03M
Dawar Cabla	10 m	OS32C-CBL-10M
Power Cable	20 m	OS32C-CBL-20M
	30 m	OS32C-CBL-30M
Ethernet Cable	2 m	OS32C-ECBL-02M
	5 m	OS32C-ECBL-05M
	15 m	OS32C-ECBL-15M

OS32C Safety Laser Scanner Brackets

Description	Part Number
Bottom/Side Mounting Bracket	OS32C-BKT1
XY Axis Rotation Mouting Bracket	OS32C-BKT2
Simple Mounting Bracket	OS32C-BKT3
Protective Cover for Window	OS32C-BKT4
Mounting Stand	OS32C-MT
Hardware kit for Mounting Stand	OS32C-HDT

OS32C Spare/Replacement Parts

Part Number
OS32C-WIN-KT
OS32C-SN
OS32C-SN-4M
OS32C-SN-DM
OS32C-SN-DM-4M
OS32C-CBBP
OS32C-CBSP1

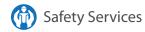


G9SE - Safety Relays

- A compact safety relay for simple safety applications, with screwless terminals and increased diagnostic capabilities for fast troubleshooting and easy wiring
- Modules with two or four safety contacts and OFF-delay timing options
- Compact units, 17.5 or 22.5 mm wide
- Front side wiring using screw less terminals and led indicators for fast diagnostic







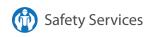
Safety Outputs	Auxiliary Output	OFF-delay Max. time	Power	Model
2	_	-	24VDC	G9SE-201
4		-		G9SE-401
2		5 s		G9SE-221-T05
2		30 s		G9SE-221-T30

G9SA - Expandable Safety Relay

- All-purpose expandable safety relays series ideal for high demand applications.
- Ideal for high demand applications.
- Expandable outputs options only, up to 8: instantaneous or time-delay
- Simple expansion connection available







Safety Outputs	Auxiliary Outputs Power		Model
3	1		G9SA-301 AC/DC24
5	1	241/06	G9SA-501 AC/DC24
3	1	24VDC	G9SA-EX301
3	1		G9SA-TH301 AC/DC24*

^{*} Two hand controller (type III C, EN 574)



G9SX - Safety Modules

- A versatile safety relay series, ideal for scalable safety solution, support logical "AND" functions for expansion and offer special modules for dedicated safety functions
- G9SX-family modules can be connected by a logical "AND" function to implement partial/global stopping of a machine
- Solid-state outputs, detailed LED diagnosis and clever feedback signals help to keep maintenance easy
- Expansion units with safe timing functions complete the line-up







Terminal Block Type	Safety Output Instantaneous	Safety Output – Off-Delayed	Safety Standstill detection output	Safety slow-speed/ stopping detection output	Auxiliary Outputs	Power	Model
Screw Terminal	2	0	0	0	2		G9SX-BC202-RT DC24
Spring-cage terminals	3	2	0	0	2	- 24VDC	G9SX-AD322-T15-RC DC24*
Screw Terminals	0	0	3	0	2		G9SX-SM032-RT
Screw Terminals	2	0	0	2	4		G9SX-LM224-F10-RT **
Screw Terminals	2	0	0	0	2		G9SX-NS202-RT DC24 ***
Screw Terminals	2	2	0	0	2		G9SX-NSA222-T03-RT DC24

^{*}Off-Delay:

T15: 0/0.2/0.3/0.4/0.5/0.6/0.7/1/1.5/2/3/4/5/7/10/15 s

T03: 0/0.2/0.3/0.4/0.5/0.6/0.7/0.8/0.9/1.0/1.2/1.4/1.8/2.0/2.5/3.0 s

 $[\]ensuremath{^{**}}$ Safe Standstill monitoring unit based on Back EMF operation for two and three phase systems.

^{***} Limited speed monitoring unit



D41D - High-Coded Non-Contact Safety Door Switch

- Type 4 High-coded door switch, RFID
- Easy and quick automatic paring with Individual coding, single or multiple teaching type
- Three sizes of actuator, including flat and miniature to fit in narrow spaces or inside corners
- Symmetrical design for left and right mounting
- Approach direction can be either from the front or side
- Extensive diagnostic via a three-color LED indicators and diagnostic output
- Up to 31 safety door switches from D41 Series can be connected







Sensor	Part Number	Coding Level	Connector
Concor	D41D-1CD-N1	High, Individual coding	M8 connector
Sensor	D41D-2CD-025N2	High, Individual coding with no limitation	M12 with 250 mm cable
	Part Number	Туре	Dimensions
	D41D-A1	Standard	W x D x H= 39 x 29.5 x 18 (mm)
Actuator ¹	D41D-A2	Flat	W x D x H= 60 x 16 x 6.8 (mm)
	D41D-A3	Miniature	W x D x H= 22 x 9 x 7 (mm)
1. Actuators sold separately			

Accessories

	Part Number	Description
	D41D-8P5-CFM8-702M	Cable, 2m, M8 connector, IP67
	D41D-8P5-CFM8-705M	Cable, 5m, M8 connector , IP67
Cables	D41D-8P5-CFM8-710M	Cable, 10m, M8 connector , IP67
	D41L-8P5-CFM12-905M	Cable, 5m, M12 connector, IP69
	D41L-8P5-CFM12-910M	Cable, 10m, M8 connector, IP69
Sealing Kits	D41D-SK Seal mounting holes. Contains: 4 flat plugs and 4 plugs with rim for high s	
Mounting Kits	D41D-MS	Contains: 2 mounting plates and 4 ferrule plugs



D41L - Type 4 High-Coded Guard Lock Switch

- Type 4 High-coded door switch, RFID
- Easy and quick automatic paring with Individual coding, single or multiple teaching type
- Improved hygiene: resistant to wide range of cleaning agents, easy to clean
- Protection class IP66, IP67 and IP69 and ECOLAB certified
- Large actuator tolerances and easy latching force adjustment
- Power to lock or power to unlock versions with optional emergency exit
- 3 actuating directions with identical mounting for left and right hinged doors







- 3 LED indicators for smart diagnostics
- Star handle instead of key hole to prevent water and foreign material to collect
- Device can be used as an end stop for sliding door applications
- Up to 31 devices connected in series

	Part Number	Lock and Release	Teaching	OSSD Configuration	Connection Method
	D41L-1YDG-N2	Power to lock	Individual coding, single teaching	Guard monitoring and lock monitoring	No
	D41L-2YDG-N2	(solenoid lock)	Individual coding, multiple teaching		
	D41L-2ZDGE-N2			Only guard monitoring	Yes
	D41L-1ZDA-N2	Power to unlock	Individual coding, single teaching	- cy guara memer	No
	D41L-2YDA-N2	(mechanical release)		Guard monitoring	
	D41L-2YDAE-N2		multiple teaching	and lock monitoring	Yes
	Part Number	Description			
Actuator ¹	D41L-A1	Compatible with D41L models			

^{1.} Actuators sold separately

Accessories

	Part Number	Description
Cables	D41L-8P5-CFM12-905M	Cable, 5m, M12 connector, IP69
	D41L-8P5-CFM12-910M	Cable, 10m, M8 connector, IP69
Mounting Plate	D41L-MP	Mounting plate for sensor only
Mounting Set	D41L-MS	Mounting set for actuator only



D41G - Type 4 High-Coded Guard Lock Switch

- Type 4 High-coded door switch, RFID
- Easy and quick automatic pairing with individual coding, single or multiple teaching type
- Power to lock and power to unlock versions available
- OSSD configuration for guard monitoring only or guard and lock monitoring
- Extensive diagnostic via a three-color LED indicators and diagnostic output
- Easily mounted to standard aluminum profile systems
- Up to 31 devices connected in series







	Part Number	Lock and Release	Teaching	OSSD Configuration	Connection Method
	D41G-1YDA-N2	Power to unlock	Individual coding, single teaching		
	D41G-2YDA-N2	Power to unlock		Guard monitoring	M12 connector
Sensor ¹	D41G-2YDG-N2	Power to lock		and lock monitoring	
	D41G-2YDG-N2	Power to lock	Individual coding, multiple teaching		
	D41G-2YDG-T1	Power to lock			Cavarra Tarmain al
	D41G-2ZDA-T1	Power to unlock		Only guard monitoring	Screw Terminal

^{1.} Actuators sold separately

Accessories

	Part Number	Description
Cables	D41L-8P5-CFM12-905M	Cable, 5m, M12 connector, IP69
Cables	D41L-8P5-CFM12-910M	Cable, 10m, M8 connector, IP69

Note: Tables include representative part numbers. Bold models: Preferred Availability. Please consult the product page for more details.



D41G Actuators

- Actuators for right and left hinged doors with door handle and optional emergency exit and lock-out tag as well as options available for sliding doors
- · Actuators for right and left sliding doors







Actuator Type ¹	Part Number	Handle Position	Emergency Exit Unit	Lock-out option
	D41G-A2L-E1	1 -64	Yes	-
Medical control allo	D41G-A2L-E1T	- Left	Yes	Yes
With door handle	D41G-A2R-E1	8. 1.	Yes	-
	D41G-A2R-E1T	Right	Yes	Yes
Non door handle	D41G-A1L	Left	-	-
	D41G-A1R	Right	-	-

^{1.} Actuators sold separately

D40Z - Compact Non-Contact Door Switch

- Up 30 Switches can be connected to one Safety Controller while maintaining PLe/safety category 4
- Can be connected to G9SP or G9SX-NS[] Safety Controllers
- LED indication for easy troubleshooting
- Compact Non-contact Door Switch can be mounted from both sides







Cable length	Auxiliary Outputs	Model
2 m	1	D40Z-1C2
5 m	1	D40Z-1C5

Note: Tables include representative part numbers. Bold models: Preferred Availability. Please consult the product page for more details.



D40P - Non-Contact Safety Switches

- Hall effect technology provides solid state outputs for increased longevity
- LED indicates operation state
- Operates with all OMRON safety controllers and safety relays
- Connect up to 20 switches in series, up to PLd acc. EN ISO 13849-1







Body Size	Housing	Contacts	Cable Connection	Model
Elongated			M12, 8 pin, fitted with 250 mm cable	D40P-LPC-21-M12
Small	Polyester Housing	2016 / 4010	M12, 8 pin, fitted with 250 mm cable	D40P-SPC-21-M12
Barrel		2NC / 1NO	5 m pre-wired	D40P-BPC-21-05
Small	Stainless Steel		5 m pre-wired	D40P-SMC-21-05
Small	Hygienic	2NC / 1NO	M12, 8 pin, fitted with 250 mm cable	D40P-SHC-21-M12

Accessories

Туре	Description	Model
Cables, M12 female - 8 pin to flying leads	5m	D40ML-CBL-M12-5M
Cables, M12 female - 8 pin to flying leads	10m	D40ML-CBL-M12-10M
T-Connector Connection Cable	T-Connector for M12 cable	D40P-8PTC-M12

D40ML - RFID Magnetic Locking Safety Switch

- Magnetic latching combines with RFID technology to deliver high holding force and tamper resistance
- Residual magnetism acts as light door latch after unlocking and it provides multiple holding forces
- Clean/Sanitize in Place stainless steel versions are rated IP69K
- For use on machines with no rundown time if power is lost



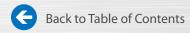




Actuator Type	Case Material	Holding Force	Cable Connection	Model
Basic	Diecast Metal (IP67)	1500N		D40ML-M1-B-M12
Basic	Plastic (IP67)	1500N	Pigtail w/ M12 Connector	D40ML-P1-B-M12
Basic	316 Stainless Steel (IP69K)	950N		D40ML-SS1-B-M12
Unique	316 Stainless Steel (IP69K)	600N	5m Cable	D40ML-SS2-U-5M

Accessories

Туре	Description	Model
Cables, M12 female - 8 pin to flying leads	5m	D40ML-CBL-M12-5M
Cables, M12 female - 8 pin to flying leads	10m	D40ML-CBL-M12-10M



D4SL-N - Guard Lock Safety Door Switch

- A wide variety of built-in switches can be used for various devices (4-, 5-, and 6-contact models are available)
- Removable terminal block for easy wiring and quick maintenance
- Key holding force of 1,300N
- Slide key available to prevent workers from becoming trapped inside the hazardous area
- Can be easily mounted on 40 × 40 mm aluminum frames







Туре	Conduit Size	Contact Model	Head Material	Door Lock and Release	Indicator	Model
	1/2-14NPT *	2NC/1NO + 2NC/1NO	Metal	Mechanical lock/24VDC solenoid release	Yes	D4SL-N3NDA-D
DAGL N	1/2-14NPT*	2NC/1NO + 2NC/1NO	Metal	24VDC solenoid lock/mechanical release	Yes	D4SL-N3NDG-D
D4SL-N	M20	3NC + 1NC/1NO	Resin	Mechanical lock/24VDC solenoid release	Yes	D4SL-N4GFA-D
	G1/2	2NC/1NO + 2NC/1NO	Resin	Mechanical lock/24VDC solenoid release	Yes	D4SL-N2NFA-D4

^{*} M20, includes M20-to-1/2-14NPT conversion adapter.

Slides Key for D4SL

- Lockout Key to prevent workers from becoming trapped inside the hazardous area
- The plastic material makes the Slide Key suitable for lightweight doors







Description	Model	
Slide Key Kit	D4SL-NSK10-LK	
Slide Key with inner lever	D4SL-NSK10-LKH	

Operation Keys for D4SL

Mounting Orientation	Special Function	Model
Horizontal	-	D4SL-NK1
Horizontal	Rubber cushions	D4SL-NK1G
Vertical	-	D4SL-NK2
Horizontal	Adjustable	D4SL-NK3



PMAC Motion Controllers CK3 Series CK3E - EtherCAT Based Controllers

- 32, 16 or 8 axes motion control
- Up to 250 μs cycle time
- Compatible with standard G-Code functions
- Save space & wiring thanks to compact design
- CAD/CAM for easy motion control
- EtherCAT for flexible configuration







Number of Axis	Memory capacity	Programming language	Model
8			CK3E-1210
16	1G	G-Code/ANSI C/original programming language	CK3E-1310
32		, 3 3 3	CK3E-1410

By combining global leading Delta Tau Data Systems' Motion Control technologies, Omron can open up new applications and solutions. The CK3E is a controller designed for precise multi-axis control. You can build a system capable of controlling up to 32 axes of motion and incorporate customized control algorithms into the system. The CK3E allows you to program in C language and reuse existing software assets. The compact design saves space in machines and control panels. EtherCAT® connects servo drives, I/O, and other devices to the CK3E, reducing the number of cables.

CK3M - Modular Controllers

- · Local axes for nanoscale precision
- Ultra high-speed synchronous control (50µs/5 axes)
- Custom servo regulation algorithms
- Flexibility on using multi-vendor actuators and encoders
- Flexibility on programming on G-code, ANSI C or original programming language



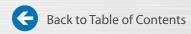




Product Type	Memory capacity	EtherCAT® port	EtherCAT Axes	Expansion	Model
		-	-		CK3M-CPU101
	RAM: 1 GB Built-In flash memory: 1 GB	EtherCATEtherCAT®: 1 port (DC sync)	4	One expansion rack can be connected using the expansion master unit and expansion slave unit	CK3M-CPU111
CPU Units			8		CK3M-CPU121
	RAM: 2 GB Built-in flash	EtherCATEtherCAT®: 1 port (DC sync)	16		CK5M-CPU131
	memory: 4 GB		32		CK5M-CPU141

Maximize your machine's performance: Performing precise linear motor drive control and nanoscale positioning, the PMAC (Programmable Multi Axis Controller) has been appreciated by manufacturers of semiconductor manufacturing equipment and other leading-edge equipment. Omron now offers a next generation motion controller CK3M that packs PMAC's superior motion control capability, multi-vendor connectivity, and flexible development capability into its compact design. The CK3M removes constraints and barriers and maximizes your machine's capabilities.





Product Type	Amplifier interface		Encoder interf	ace		Output ty	pe N	Nodel
	DirectPWM output						C	K3W-AX1313N
	DA output (Filtered PWM)	Digital	quadrature encoder/	drature encoder/serial encoder		NIDNI 4		K3W-AX1414N
	DA output (True DAC)				INPIN	NPN type		K3W-AX1515N
Axial Interface Units	DirectPWM output	Sinusoidal encoder/Serial encoder					C	K3W-AX2323N
	DirectPWM output						C	K3W-AX1313P
	DA output (Filtered PWM)	Digital	quadrature encoder/	serial encoder	DNID	tv (2.0	C	K3W-AX1414P
	DA output (True DAC)				PINP	type	C	K3W-AX1515P
	DirectPWM output	Sinuso	idal encoder/Serial er	ncoder			C	K3W-AX2323P
Product Type	Feedback interface		Output type	2		TCR Outp	ut N	Model (
	VV/2 4 2 2						C	:K3W-GC1100
	XY2-100	D14/4.4			TCR	Output	C	:K3W-GC1200
Laser Interface Units			- PWM output				C	K3W-GC2100
	SL2-100				TCR Output		C	K3W-GC2200
Product Type	Feedback interface	Feedback type		Number of channels Mo		annels N	Nodel	
Serial Encoder Interface Unit	Serial Encoder	BiSS-C,	Endat2.2, and 15 Mo	tor	4		C	CK3W-ECS300
Product Type			Description			Model		
Power Supply Unit	Rated output voltage:	5 VDC / 2	24 VDC			CK3W-PD	048	
Product Type	Number of inputs	Numb	er of outputs	I/O type	Model		Model	
				NPN			CK3W-MD	7110
Digital I/O Units	16 points	16 poir	nts	PNP	CK3W-N		CK3W-MD	77120
Product Type	Input Range		Number of inputs			Model		
			4 points			CK3W-AD2	2100	
Analog Input Units	Unit -10 to 10 V	8 points		CK3W-AD3100		3100		
Product Type	Product Name			Function				Model
	Expansion Master Unit	Expa	nsion Master Unit cor	nnects to the rig	ht side	e of the CPU	Unit	CK3W-EXM01
Expansion Master Unit and Expansion Slave Unit	Expansion Slave Unit	Expa	nsion Slave Unit conr	ects to the right	t side (of the Powe	r Supply Un	it CK3W-EXS02
Expansion Slave Unit	Expansion cable	То со	nnection between th	e Expansion Ma	ster U	nit and Slav	e Unit (0.3n	n) CK3W-CAX003A



CK3C - Compact PMAC Controller

- ARM Dual Core 1GHz Processor
- Memory: 1GB RAM, 1GB Flash
- Local/direct amplifier interface as well as EtherCAT
- Multiple encoder interfaces available with ACC modules
- On Borad IO available with ACC modules
- EtherCAT for flexible configuration







Model	Analog I/O	Ethernet Port(s)	EtherCAT License	Extended Pin
CK3C-AX1100	No	1	No	No
CK3C-AX1100E	No	1	No	Yes
CK3C-AX1201	"4x 16-bit Al 1x Filtered PWM AO "	2	No	No
CK3C-AX1201E	"4x 16-bit Al 1x Filtered PWM AO "	2	No	Yes
CK3C-AX1211	"4x 16-bit Al 1x Filtered PWM AO "	2	I/O Only	No
CK3C-AX1211E	"4x 16-bit Al 1x Filtered PWM AO "	2	I/O Only	Yes
CK3C-AX1231	"4x 16-bit Al 1x Filtered PWM AO "	2	8 Servo	No
CK3C-AX1231E	"4x 16-bit Al 1x Filtered PWM AO "	2	8 Servo	Yes

Model		Analog I/O
ACC 2452	3-4050000-000-000000	4-Channel expansion
ACC-24S3	3-4050000-000-010000	4-Channel expansion with 4 analog inputs & 1 Filtered PWM output
ACC 516	3-3674-0-0002-000000	2 channel 4096x interpolator board for sinusoidal encoders
ACC-51S	3-3674-0-0012-000000	4 channel 4096x interpolator board for sinusoidal encoders
	3-3936-0-0002-000000	4-Channel SSI serial encoder protocol
	3-3936-0-0003-000000	4-Channel ENDAT serial encoder protocol
	3-3936-0-0006-000000	4-Channel Yaskawa Sigma II & III serial encoder protocol
166.046	3-3936-0-0008-000000	4-Channel Panasonic serial encoder protocol
ACC-84S	3-3936-0-000D-000000	4-Channel Mitsubishi serial encoder protocol
	3-3936-0-000E-000000	4-Channel 1S serial encoder protocol
	3-3936-0-0TBC-000000	4-Channel table based compare protocol
	3-3936-0-0XY2-000000	XY2-100 serial link for 2-axis and 3-axis laser scan heads and galvanometers
ACC-8AS	3A0-603673-10X	4-Channel dual 16-bit DAC analog board
ACC-8FS	3F0-603673-10X	4-Channel direct PWM breakout board
Breakout Board	CBB4-00-000-000-1000	CK3C breakout board with separate connectors for each encoder, each flag set, and servo amplifier output

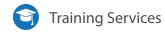


Power PMAC IDE (Integrated Development Environment)

- Based on Microsoft® Visual Studio®
- ANSI C or original programming language
- Easy tuning
- Simple setting
- Troubleshooting
- Debugger







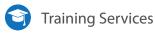


1S Series - Servomotor

- · Advanced design allows easy installation and wiring
- EtherCAT communications up to 125µsec
- Safety over the EtherCAT network
- Motor has 23-bit battery less absolute encoder
- 350% momentary torque (200 V, 750 W max.)









			Motor	Drive	Motor	Drive
RPM	Capacity	Torque	100V	VAC	480V VAC	
	0.05 kW	0.159 Nm	R88M-1M05030S-(1)S2	R88D-1SN01L-ECT		
	0.1 kW 0.2 kW 0.4 kW		R88M-1M10030S-(1)S2	R88D-1SN01L-ECT		
			R88M-1M20030S-(1)S2	R88D-1SN02L-ECT		
	0.4 kW	1.27 Nm	R88M-1M40030S-(1)S2	R88D-1SN04L-ECT		
			200V	VAC		
	0.05 kW	0.159 Nm	R88M-1M05030T-(1)S2	R88D-1SN01H-ECT		
	0.1 kW	0.318 Nm	R88M-1M10030T-(1)S2	R88D-1SN01H-ECT		
	0.2 kW	0.637 Nm	R88M-1M20030T-(1)S2	R88D-1SN02H-ECT		
3000 RPM	0.4 kW	1.27 Nm	R88M-1M40030T-(1)S2	R88D-1SN04H-ECT		
	0.75 kW	2.39 Nm	R88M-1M75030T-(1)S2	R88D-1SN08H-ECT	R88M-1L75030C-(1)S2	R88D-1SN10F-ECT
	1.0 kW	3.18 Nm	R88M-1L1K030T-(1)S2	R88D-1SN10H-ECT	R88M-1L1K030C-(1)S2	R88D-1SN10F-ECT
	1.5 kW	4.77 Nm	R88M-1L1K530T-(1)S2	R88D-1SN15H-ECT	R88M-1L1K530C-(1)S2	R88D-1SN15F-ECT
	2.0 kW	6.37 Nm	R88M-1L2K030T-(1)S2	R88D-1SN20H-ECT	R88M-1L2K030C-(1)S2	R88D-1SN20F-ECT
	3.0 kW	9.55 Nm	R88M-1L3K030T-(1)S2	R88D-1SN30H-ECT	R88M-1L3K030C-(1)S2	R88D-1SN30F-ECT
	4.0 kW	12.7 Nm	R88M-1L4K030T-(1)S2	R88D-1SN55H-ECT	R88M-1L4K030C-(1)S2	R88D-1SN55F-ECT
	4.7 kW	15.0 Nm	R88M-1L4K730T-(1)S2	R88D-1SN55H-ECT		
	5.0 kW	15.9 Nm			R88M-1L5K030C-(1)S2	R88D-1SN55F-ECT
	0.4 kW	1.91 Nm			R88M-1M40020C-(1)S2	R88D-1SN06F-ECT
	0.6 kW	2.86 Nm			R88M-1M60020C-(1)S2	R88D-1SN06F-ECT
2000 DDM	1.0 kW	4.77 Nm	R88M-1M1K020T-(1)S2	R88D-1SN10H-ECT	R88M-1M1K020C-(1)S2	R88D-1SN10F-ECT
2000 RPM	1.5 kW	7.16 Nm	R88M-1M1K520T-(1)S2	R88D-1SN15H-ECT	R88M-1M1K520C-(1)S2	R88D-1SN15F-ECT
	2.0 kW	9.55 Nm	R88M-1M2K020T-(1)S2	R88D-1SN20H-ECT	R88M-1M2K020C-(1)S2	R88D-1SN20F-ECT
	3.0 kW	14.3 Nm	R88M-1M3K020T-(1)S2	R88D-1SN30H-ECT	R88M-1M3K020C-(1)S2	R88D-1SN30F-ECT
	4 kW	25.5 Nm	R88M-1M4K015T-(1)S2	R88D-1SN55H-ECT	R88M-1M4K015C-(1)S2	R88D-1SN55F-ECT
	5.0 kW	31.8 Nm	R88M-1M5K015T-(1)S2	R88D-1SN55H-ECT		
1500 DDM	5.5 kW	35 Nm			R88M-1M5K515C-(1)S2	R88D-1SN55F-ECT
1500 RPM	7.5kW	47.8 Nm	R88M-1M7K515T-(1)S2	R88D-1SN75H-ECT	R88M-1M7K515C-(1)S2	R88D-1SN75F-ECT
	11 kW	70 Nm	R88M-1M11K015T-(1)S2	R88D-1SN150H-ECT	R88M-1M11K015C-(1)S2	R88D-1SN150F-ECT
	15 kW	95.5 Nm	R88M-1M15K015T-(1)S2	R88D-1SN150H-ECT	R88M-1M15K015C-(1)S2	R88D-1SN150F-ECT
1000 RPM	0.9 kW	8.59 Nm	R88M-1M90010T-(1)S2	R88D-1SN10H-ECT	R88M-1M90010C-(1)S2	R88D-1SN10F-ECT
	2.0 kW	19.1 Nm	R88M-1M2K010T-(1)S2	R88D-1SN20H-ECT	R88M-1M2K010C-(1)S2	R88D-1SN20F-ECT
	3.0 kW	28.7 Nm	R88M-1M3K010T-(1)S2	R88D-1SN30H-ECT	R88M-1M3K010C-(1)S2	R88D-1SN30F-ECT

Note: (1) B - Motor with brake WHITE - Without brake



1SA Series - Servomotor & Drive

- PLe/SIL3 safety functions
- STO, SS1, SS2, SOS, SLS, SLP, SDI, & SBC
- Drive with EtherCAT Communication
- Single cable design
- Right angle, rotatable, connector on motor
- Absolute encoder without the need for battery







RPM Capacity		Tavana	Motor	Drive	Motor	Drive
KPIVI	Capacity	Torque	200V VAC		400V VAC	
	0.2 kW	0.637 Nm	R88M-1AM20030T-(1)S2	R88D-1SAN02H-ECT		
	0.4 kW	1.27 Nm	R88M-1AM40030T-(1)S2	R88D-1SAN04H-ECT		
	0.75 kW	2.39 Nm	R88M-1AM75030T-(1)S2	R88D-1SAN08H-ECT	R88M-1AL75030C-(1)S2	R88D-1SAN10F-ECT
2000 DDM	1.0 kW	3.18 Nm	R88M-1AL1K030T-(1)S2	R88D-1SAN10H-ECT	R88M-1AL1K030C-(1)S2	R88D-1SAN10F-ECT
3000 RPM	1.5 kW	4.77 Nm	R88M-1AL1K530T-(1)S2	R88D-1SAN15H-ECT	R88M-1AL1K530C-(1)S2	R88D-1SAN15F-ECT
	2.0 kW	6.37 Nm	R88M-1AL2K030T-(1)S2	R88D-1SAN20H-ECT	R88M-1AL2K030C-(1)S2	R88D-1SAN20F-ECT
	2.6 kW	8.28 Nm	R88M-1AL2K630T-(1)S2	R88D-1SAN30H-ECT		
	3.0 kW	9.55 Nm			R88M-1AL3K030C-(1)S2	R88D-1SAN30F-ECT
	1.5 kW	9.55 Nm	R88M-1AM1K515T-(1)S2	R88D-1SAN15H-ECT	R88M-1AM1K515C-(1)S2	R88D-1SAN15F-ECT
1500 RPM	2.7 kW	17.2 Nm	R88M-1AM2K715T-(1)S2	R88D-1SAN30H-ECT		
	3.0 kW	19.1 Nm		_	R88M-1AM3K015C-(1)S2	R88D-1SAN30F-ECT

Note: (1) B - Motor with brake WHITE - Without brake



LD Series – Autonomous Mobile Robots

- Simplified programming and navigation using digital mapping
- In compliance with safety standards ISO 12100, ISO 14121-2 and ISO 13849-1
- Rechargeable battery with autonomy of 12 to 15 hours and self-management for recharging
- Connectivity with factory management software (MES/WMS)
- Cleanroom and ESD options available











Part Number Configurator

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No.	ltem		Specification	Symbol
1	Delegat Turns	LD 60/LD 90		0
ı	Robot Type	LD 250		2
		0.9m/s (Excludes LD 250)	90Kg (LD90)	6
2	Crossed & Davidson	1.2m/s (LD 250 Only)	250Kg	2
2	Speed & Payload	1.3m/s (Excludes LD 250)	90Kg (LD90)	4
		1.8 m/s/ (LD 60 Only)	60Kg	3
			Robot	00000
		Standard LD60 / LD 90 / LD 250	Robot, Dock	00002
2	Confirmation	LD007 LD 307 LD 230	Robot, Dock, Joystick, Top Plate	10004
3	Configuration		Robot	20000
		ESD	Robot, Dock	20002
			Robot, Dock, Joystick, Top Plate	20004

Accessories¹

Item	Description	Model
Battery ²	Power battery	20452000
Floor Monogov	Primary Fleet Manager	20271-900
Fleet Manager	Secondary Fleet Manager (Backup Unit)	20271-901
Fleet Simulator	Simulation of up to 10 AMRs	20271-903
FLOW iQ	Analytics and visualization of fleet operations (5yr)	20271-705
Cell Alignment Positioning System (CAPS)	Improved positioning of AMRs for high accuracy applications (Sold per AMR)	20271-805

^{1.} Additional accessories available, contact your Omron Sales Representative for additional details

^{2.} The battery 20452000 must be purchased separately



HD-1500 - Autonomous Mobile Robot

- Natural feature navigation: Automatically plans efficient routes and prevents collisions
- Fleet management: Operates in coordination with a fleet of up to 100 mobile robots
- Easy deployment: Installs quickly, without facility modifications
- 1500 Kg large capacity payload
- Dynamic intelligent 360° safety
- Integrated automation controller





Product Page



Product Video



Training Services



Service Contracts

Part N	umber	Config	urato
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No.	ltem		Specification	Symbol
1	Robot Type	HD-1500	HD-1500	
2	Speed & Payload	1.8 m/s	1500 Kg	8
3	Laser Version	Omron (HD)		0
			Robot	00000
			Robot, Dock	00002
			Robot, Side Lasers	00010
		Standard HD-1500	Robot, Single HAPS	00100
			Robot, Single HAPS, Side Lasers	00110
			Robot, Double HAPS	00200
4	Configuration		Robot, Double HAPS, Side Lasers	00210
			Robot, Dock, Joystick/Pendant, Top Plate	10004
			Robot, Dock, Single HAPS, Joystick/Pendant, Top Plate	10104
			Robot, Dock, Single HAPS, Joystick/Pendant, Top Plate, Side Lasers	10114
			Robot, Dock, Double HAPS, Joystick/Pendant, Top Plate	10204
			Robot, Dock, Single HAPS, Joystick/Pendant, Top Plate, Side Lasers	10214

Accessories¹

Item	Description	Model
Battery ²	Power battery	68330000
Float Management	Primary Fleet Manager	20271-900
Fleet Management	Secondary Fleet Manager (Backup Unit)	20271-901
Fleet Simulator	Simulation of up to 10 AMRs	20271-903
FLOW iQ	Analytics and visualization of fleet operations (5yr)	20271-705
Cell Alignment Positioning System (CAPS)	Improved positioning of AMRs for high accuracy applications (Sold per AMR)	20271-805

^{1.} Additional accessories available, contact your Omron Sales Representative for additional details

^{2.} Vehicle Battery (68330000) must be purchased separately from the robot and is shipped separate from the HD Vehicle.



Omron TM Collaborative Robots

- Designed to promote a safe and harmonious workplace between humans and machines.
- Easy-to-use graphical programming environment for quick startup and operation.
- Built-in vision-based robot control enables visual servoing, inspection, and measurement operations.
- TMvision and landmark allows truly flexible, fast changeover.





Product Page

Training Services



Product Video



Service Contracts

Part	Numb	er Co	nfigu	rator
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RT6- (1) (2) (3) (4) (5) (6) (7) (8)

No.	Item	Specifications	Symbol
(1)		Omron TM Collaborative Robots	
		TM5	0
		TM12	1
(2)	Model Type	TM14	2
		TM16	3
		TM20	4
(3)	Dower Cumply	AC	0
(5)	Power Supply	DC	1
(4)	Vicion Custom	Integrated Camera	0
(4)	Vision System	No Camera (X Model)	1
		700	70
(F)(C)	A was I are eith	900	90
(5)(6)	Arm Length	1100	11
		1300	13
		Standard	0
(7)		Semi S2 Certification	1
	Configuration	Standard with Ethernet/IP and PROFINET (Fieldbus)	2
		Food Grade Grease	3"
		Food Grade Grease with Ethernet/IP and PROFINET (Fieldbus)	4"
(0)	Calala Laranth	Standard Length (3m/1.5m)*	1
(8)	Cable Length	Extended Length (12m)*	2

Note: 1.5m cable is only standard on DC models. 12m cable is not available on DC models.

Accessories¹

Туре	Notes	Model
Landmark	3D position referencing label (2 units included in the robot code)	RT6-A000021
Mobile Station	Compatible with OMRON TM5 only	RT6-A000010
Portable Pedestal	Compatible only with OMRON TM5/Adjustable Height	RT6-A000009
SSD Card with cable	128 GB of memory with SATA cable	RT6-A000012
Calibration kit	Required for TCP calibration and manual vision	RT6-A000002
Pneumatic Box	Recommended to attach to the robot pedestal	RT6-A000015
Polarizer Light Module	Not compatible with OMRON TM S Series	RT6-A000022

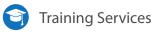
^{1.} Additional accessories available, contact your Omron Sales Representative for additional details



Omron TMS -Collaborative Robots

- Advanced hardware options and expanded safety features
- 31 safety functions, all ISO 13849-1, Cat.3, PLd, certified
- Easy-to-use programming interface (Flowchart and Script programming language available)
- Anti cutting oil corrosion joint covers
- Include all the built-in vision and landmark capabilities of standard Omron TM Cobots







Part Number Configurator

RT6-		
(1)	(2) (3) (4) (5) (6) (7) (8	3)

No.	Item	Specifications	Symbol
(1)	icen	Omron TM Collaborative Robots	Зуппон
. , ,		TM5S	0
		TM7S	6
(2)	Model Type	TM12S	1
		TM14S	2
(0)		AC	0
(3)	Power Supply	DC	1
(4)	V" : C .	Integrated Camera	0
(4)	Vision System	No Camera (X Model) ¹	1
		700	70
(F)(C)	A was I are eath	900	90
(5)(6)	Arm Length	1100	11
		1300	13
		Standard	0
(7)	Configuration	Semi S2 Certification ²	1
	Configuration	Standard with Ethernet/IP and PROFINET (Fieldbus)	2
		Semi S2 Certification with EtherNet/IP and PROFINET (Fieldbus)	5
(8)	Cable Length	Standard Length (3m/1.5m) ³	4
(0)	Cable Length	Extended Length (12m) ³	5

^{1.} Not available for DC versions.

Accessories⁴

Туре	Notes	Model
Landmark	3D position referencing label (2 units included in the robot code)	RT6-A000021
Mobile Station	Compatible with OMRON TM5S, TM7S, TM5-700, and TM5-900	RT6-A000010
Portable Pedestal	Compatible only with OMRON TM5/Adjustable Height	RT6-A000009
SSD Card with cable	128 GB of memory with SATA cable	RT6-A000012
Calibration kit	Required for TCP calibration and manual vision	RT6-A000002
Polarizer Light Module	Not compatible with OMRON TM S Series	RT6-A000022

^{4.} Additional accessories available, contact your Omron Sales Representative for additional details

^{2.} Available for TM12S and TM14S only.

^{3. 1.5}m cable is only standard on DC models. 12m cable is not available on DC models.



TMFlow - Omron TM Collaborative Robot Software

- Intuitive, graphical programming enables users to create complex robot solutions without requiring extensive training or programming experience
- Built-in vision-based robot tasks including barcode scanning, pattern matching, and fiducial mark matching are simple to integrate into a project
- Landmarks can be used as reference points for the robot, allowing the robot to be flexibly relocated between workstations while minimizing changeover times
- The Plug & Play ecosystem of tools and peripherals can quickly and easily be configured within TMFlow

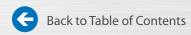






Part Numbers

Product Name	Add-On Product Names	Remarks	Part Number	Add-On Part Numbers
USB Dongle	_	Required for all extra software licenses.	RT6-A000004	_
TMFlow	_	Software required to control the cobot. Free download.	_	_
	TM Identify & Measure	License, add-on to TMFlow. Includes: Identification of pose variation, specific color area size, subtract reference image, line/circle burr, counting and gauge.	_	RT6-S100000
	TM External Vision	License, add-on to TMFlow. Required when using eye-to- hand cameras.	_	RT6-S100002
	TM OCR	License, add-on to TMFlow. Includes: Text OCR and Number OCR	_	RT6-S100003
TMFlow Editor	_	License, provides a convenient way to open and edit project offline.	RT6-S200001	_
	TMFlow editor - Offline AOI License, add-on to TMFlow Editor. Enables TMFlow Editor to offline edit a TMFlow project that includes AOI vision.		_	RT6-S100005



Hornet 565 - Parallel Robots (Standalone)

- High-speed operation tracks up to a conveyor speed of 1.4 m/s
- Designed with a high payload to support multi-hand (multi-picking)
- Supports fast Pick & Place on a fast conveyor
- Maximum working diameter 1,130 mm
- · Maximum payload 8 kg
- Programmable through ACE software and eV+ language, or through the familiar IEC 61131-3 when using ePLC Connect







Training Services



Service Contracts

Item Nu	Number of Axes IP		P Maximum Payload	Working volume					
		IP		X,Y axis (stroke)	Z axis (stroke)	theta axis (rotation angle)			
Hornet 565	2	Standard	8 kg		0.1	0.1			
	3 axes	IP65/67		1120	425	-			
	4	Standard		1130 mm			1130 mm	425 mm	13600
	4 axes	IP65/67					±360°		

Note: Additional accessories available, contact your Omron Sales Representative for additional details

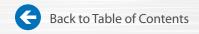
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Part Number Configurator

(1

(2)(3)

No.	ltem	Speci	Symbol	
			eV+	0
		Without Smart Controller EX	ePLC	1
1	Bundle Type		Add-On	3
		With Smart Controller EX	eV+	2
			PLC	4
2	IP Rating		IP20/IP65/IP67	0
2	(Topside/Underside/Platform & Arms)		IP65/IP65/IP67	1
3	Number of Axes & Max Payload		3 Axis / 8kg	0
			4 Axis / 3kg	4

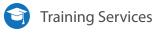


iX3-565 Parallel Robots (Integrated Controller)

- High-speed operation tracks up to a conveyor speed of 1.4 m/s
- Designed with a high payload to support multi-hand (multi-picking)
- Supports fast Pick & Place on a fast conveyor
- Maximum working diameter 1,130 mm
- · Maximum payload 8 kg
- EtherCAT connectivity to the Omron NJ501-R Integrated Controller and programming through familiar IEC 61131-3 programming language or scripting (eV+)









Item I	Number of Axes IP			Working volume						
		IP	Maximum Payload	X,Y axis (stroke)	Z axis (stroke)	theta axis (rotation angle)				
iX3-565	2	Standard	- 8 kg - 3 kg	0.1	0.1	0.1	0.1	0.1		
	3 axes	IP65/67			425	-				
	4	Standard		3 kg	3 kg	2.1		1130 mm	425 mm	13609
	4 axes	IP65/67						±360°		

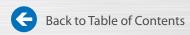
Note: Additional accessories available, contact your Omron Sales Representative for additional details

RX3-20656 🗆 🗆

Part Number Configurator

(1)(2)

No.	ltem Specification		Symbol
1	Dunka ski ov. Dakim sv	IP20 Topside/IP65 Underside/IP67 Platform & Arms	0
I	1 Protection Rating	IP65 Topside & Underside/IP67 Platform & Arms	1
	N. 1. CA	3 Axes	0
2	Number of Axes	4 Axes	4



Quattro Parallel Robots (Standalone)

- Four-axis arm evenly distributes the load on the robot to achieve fast, high-precision motion
- Designed with a high payload to support multi-hand (multi-picking)
- Supports high-speed Pick & Place operations on fast moving conveyors
- Maximum working diameter of 1,300mm & 1,600mm
- Maximum payloads of 10kg & 15kg
- Programmable through ACE software and eV+ language, or through the familiar IEC 61131-3 when using ePLC Connect
- USDA compliant versions available







Training Services



Service Contracts

					Working volume		
Item	Number of Axes	Туре	IP Maximum Pa	Maximum Payload	X,Y axis (stroke)	Z axis (stroke)	theta axis (rotation angle)
			Standard	6 kg (P30: 15 kg)			0° (F.v. d) (D20)
Quattro 650H/HS		Н	IP65/67		1300 mm		
	4	HS	Standard 3 kg (P30: 12 kg)		500	0° (fixed) (P30) ±46.25° (P31)	
	4		Standard	4 kg (P30:10 kg) 1600 mm 1 kg (P30: 7 kg)		500 mm	±92.5° (P32)
Quattro 800H/HS		Н	IP65/67			±185° (P34)	
		HS	Standard				

Note: Additional accessories available, contact your Omron Sales Representative for additional details

1721-0-2600

Part Number Configurator

(1)

(2)(3)(4)

No.	ltem	Speci	ification	Symbol
		Without Smart Controller EX	Add-On	3
1	Bundle Type	With Smart Controller EX	eV+	2
		With Smart Controller EX	ePLC	4
2	Reach		650mm (1300mm total)	0
	Reacti		800mm (1600mm total)	3
3	Max Payload (650mm/800mm)	"3kg/1kg (12kg/7kg with P30)"	IP65/IP65/IP67, Stainless Steel Platform (HS)	1
3	IP Rating	(4.01 (4.01 1.1 0.00)))	IP20/IP65/IP67 (H)	0
	(Topside/Underside/Platform & Arms)		IP66/IP66/IP67 (H)	2
			(P30) / No Rotation	0
_	Diations Time / Detation		(P31) / ± 46.25°	1
4	Platform Type / Rotation		(P32) / ± 92.5°	2
			(P34) / ± 185°	4



iX4 – Parallel Robots (Integrated Controller)

- Four-axis arm evenly distributes the load on the robot to achieve fast, high-precision motion
- Designed with a high payload to support multi-hand (multi-picking)
- Supports high-speed Pick & Place operations on fast moving conveyors
- Maximum working diameter of 1,300mm & 1,600mm
- Maximum payloads of 10kg & 15kg
- EtherCAT connectivity to the Omron NJ501-R Integrated Controller and programming through familiar IEC 61131-3 programming language or scripting (eV+)
- USDA compliant versions available









						Working volume	
Item	Number of Axes	Туре	IP	Maximum Payload	X,Y axis (stroke)	Z axis (stroke)	theta axis (rotation angle)
		Н	Standard	6 kg (P30: 15 kg) 3 kg (P30: 12 kg)			0° (fixed) (P30) ±46.25° (P31) ±92.5° (P32)
iX4-650H/HS		• • • • • • • • • • • • • • • • • • • •	IP65/67		1300 mm		
	4	HS	Standard			500 mm	
	4		Standard	4 less (B20 10 less)			
iX4-800H/HS		Н	IP65/67	4 kg (P30:10 kg)	1600 mm		±185° (P34)
		HS	Standard	1 kg (P30: 7 kg)			

Note: Additional accessories available, contact your Omron Sales Representative for additional details

Part Number Configurator

RX4-2166 \(\bigcup \(\bigcup \) \(\bigcup \) \(\bigcup \) \(\bigcup \) \((1) \((2) \) \((3) \)

No.	ltem	Specification	Туре	Symbol
1	Doode	650mm		0
1	Reach	800mm		3
	2 Protection Rating	IP20 Topside/IP65 Underside/IP67 Platform & Arms	11	0
2		IP65 Topside & Underside/IP67 Platform & Arms	H	1
	IP66 Topside & Underside/IP67 Platform & Arms	HS	2	
		No Rotation / H: 15kg HS: 12kg (650mm Reach)H: 10kg HS: 7kg (800mm Reach)		0
2	Z Rotation / Max	± 46.25° / H: 6kg HS: 3kg (650mm Reach)H: 4kg HS: 1kg (800mm Reach)		1
3 Payload	Payload	± 92.5° / H: 6kg HS: 3kg (650mm Reach)H: 4kg HS: 1kg (800mm Reach)		2
		± 185° / H: 6kg HS:3kg (650mm Reach)H: 4kg HS: 1kg (800mm Reach)		4



i4L - SCARA Robots

- 5kg payload, high inertia and high duty ratings enable the i4L to tackle more challenging processes with ease
- Compact built-in internal controller, out-of-the-box table or wall mounting and options for rear or bottom cabling reduces the physical area required and enables a customized installation
- High visibility, customizable, multi-colored LED dome light provides an intuitive visual indication of status
- Available in 350mm, 450mm, and 550mm reaches to accommodate a wide range of applications
- Easily integrates with the full line of Omron
 Automation products as well as 3rd party automation
 platforms





9	Tra

Training Services



Part Number Configurator $RS4-20 \square \square 0$

(1) (2) (3) (4)

No.	ltem	Specification	Symbol
1	Control Type	Standard Control	5
	Control type	Integrated Control	6
		350mm	3
2	Reach	450mm	4
		550mm	5
3	Cabling	Rear Panel	0
3	Cabing	Bottom Panel	1
4	Ovill Longth	180mm	2
4	Quill Length	350mm (550mm Reach Only)	4

Note: Additional accessories available, contact your Omron Sales Representative for additional details



i4H - SCARA Robots

- 15kg payload, high inertia and high duty ratings enable the i4H to tackle applications that require high performance
- · Compact built-in internal controller, and choice of standard or inverted configurations reduces the physical area required and enables a customized installation
- High visibility, customizable, multi-colored LED ring light and LCD screen provides an intuitive visual indication of status
- Available in 650mm, 750mm, and 850mm reaches to accommodate a wide range of applications





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Part Number Configurator $RS4-20 \square \square$

(1) (2) (3) (4) (5)

No.	ltem	Specification	Symbol
1	Control Tuno	Standard Control	5
I	Control Type	Integrated Control	6
		650 mm	6
2	Reach	750 mm	7
		850 mm	8
	Manual Conference	Standard	5
3	Mount Configuration	Inverted	7
	4 Protection Rating / Feature	IP20 with standard lubrication	0
		IP20 with Food Grade lubrication	5
4		IP65 with Food Grade lubrication	4
		Cleanroom / ESD with Standard lubrication	1
		210 mm w/standard lubrication (IP20 and Clean Room only)	2
_		210 mm w/Food Grade lubrication (IP20 and IP65 only)	3
5	Z-axis Quill Stroke Length	410 mm w/standard lubrication (IP20 and Clean Room only)	4
		410 mm w/Food Grade lubrication (IP20 and IP65 only)	5

Note: Additional accessories available, contact your Omron Sales Representative for additional details



Automation Control Environment (ACE) – Fixed Robot Software

- Provides an easy-to-use interface for setting up, programming, troubleshooting and operating Omron fixed industrial robots
- Fast emulation and 3D visualization of robot applications for quick proof of concept tasks
- Wizard-based user-friendly interface to calibrate and teach the robots
- Simplification of application development tasks, by means of the Application Manager modules
- Recipe Manager simplifies management of manufacturing processes and handles a range of product variations, ideal for flexible automation to reduce changeover time
- Robot Vision Manager provides algorithms and tools for easily integrating vision systems into robotic applications
- Robot Vision Manager also includes vision inspection tools to improve quality assurance and traceability







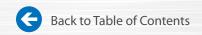
Training Services

 Pack Manager can manage scalable packaging lines from integration to deployment without complex scripting via step-by-step setup wizards that configure process specific items, such as controllers, robots, and conveyor belts

ACE License Configuration

Product Name	Add-On Product Names	Remarks
Ace PackManager (for ACE 4.x) 20409-000		Enables full functionality of the ACE PackManager software.
Robot Vision Manager (for ACE 4.x)	20410-000	Enables the Robot Vision Manager functionality and inspection tools library.
Dual (PackManager plus Vision)	20433-000	Enables functionality of both PackManager and Robot Vision Manager

Note: When you create robot programs without using PackManager wizards and vision system, the ACE license is not required



IPC Application Controller – Robot Process Manager and Vision System

- Built-in vision processor with 128GB SSD, optimized to process high resolution, high frame rate images
- Supports Omron "Manager" software packages (ie: Robot Vision Manager, PackManager, RecipeManager, 3D PickManager)
- Easy setup with ACE or Sysmac Studio
- Unique simplified thermal design to maximize uptime
- GigE PoE and USB 3.0 ports for increased connectivity and fast data transmission
- Supports up to 8 cameras simultaneously
- Compact design minimizes panel space and allows 2 mounting orientations
- Compatible with Omron S8BA Series UPS





Specifications

Item		Specifications
Part Number		AC1-152000
	CPU	Intel® Core™ i5-7440EQ
Main System	Main Memory	8 GB DDR4
	Graphics Controller	Intel® HD Graphics
Operating System		Windows 10 Io T Enterprise LTSB - 64 bit
Storage Devices	Hard Drive	128 GB SSD Additional 3.5" hard drive slot available Additional SD memory card slot available, up to 32 GB capacity
Power Supply		20.4 to 28.8VDC
	Power Connector	24 VDC
	I/O Connector	2 inputs (UPS signal and power OFF control) and 1 output (industrial Box PC power state)
Communications	Ethernet Connector	Gigabit Ethernet x 3, Gigabit Ethernet with POE x 4 3W max power consumption per port
Port	USB	USB 3.0 x 4 (3m max cable length), USB 2.0 x 2 (5m max cable length)
	Display	DVI-Connector x 1 (up to 1,920 x 1,200 @60Hz)
	RS-232C	Standard DSUB9 connector (Non-isolated)



NJ501-R - Integrated Robot Controller

- Integration of Robotics, Logic, and Motion in one CPU
- Programming with variables allows users to create complex programs efficiently
- Offers speed without compromising on reliability and robustness expected from PLCs
- Conforms to IEC 61131-3 (JIS B 3503) standard programming and PLCopen function blocks for motion control and traditional V+ scripting for robot and motion control
- Complete RAS Functions: Transmission frame error check, Timeout, Bus diagnosis, Watchdog (WDT), Memory check, and Topology check, etc.
- Fast and accurate control by synchronizing all EtherCAT devices, such as vision, servos, robots, and IO with a single controller





Specifications

Item		Product Description
Product Name		NJ50-R[][][]
Description		Machine controller with sequence, motion and robitics functionality
Software		Sysmac Studio
Programming		IEC 61131-3 (Ladder, Structured Text, Function Blocks) eV + Scripting
Program Capacity		20 MB
Memory Card		SD/SDHC memory card
Variable Core situ	No retain attribute	4 MB
Variable Capacity	Retain attribute	2 MB
Built-in Ports		EtherCAT, Ethernet/IP, USB 2.0
Number of EtherCAT slaves		192
Max Number of robots		8
Max Numbers of Axes		64, 32, 16

Part Numbers

Туре	Part Number
Integrated Controller (16 Axis, NO Database)	NJ501-R300
Integrated Controller (32 Axis, NO Database)	NJ501-R400
Integrated Controller (64 Axis, NO Database)	NJ501-R500
Integrated Controller (16 Axis, WITH Database)	NJ501-R320
Integrated Controller (32 Axis, WITH Database)	NJ501-R420
Integrated Controller (64 Axis, WITH Database)	NJ501-R520



Training Services

- Comprehensive coverage of Omron's technologies enable users to configure and maintain equipment effectively
- Industry specific curricula available for professional development within manufacturing
- Balance of theory and hands on training optimized for the best learning outcome
- Varied offering with multiple training paths for beginners and experienced professionals
- Flexible scheduling with courses available In person, Virtual Live, or On Demand





	Training Type	Subject	Audience
Omron Technologies	Product Programming Training	Sysmac Robotics Vision Systems Advanced Motion	For engineers, programmers and engineers responsible for setup and configuration
	Product Maintenance Training	Sysmac Robotics	For maintenance and other personnel responsible for maintaining and servicing equipment
	Specialized Advance Training ¹ 1. Contact your local representative for more information	Application or feature specific training	For engineers who want customized training on specific applications or features
Industry Curricula	Skill Builders	Machine Safety Traceability 4.0	For personnel who want to learn introductory manufacturing concepts
	Certification Training	TÜV Functional Safety of Machinery	For technicians and engineers as well as EHS personnel who want to become certified in functional safety



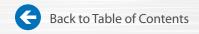
Robotics Complete Care Service Contracts

- Comprehensive program which provides support and parts needed for robot maintenance
- Eliminates budget uncertainty while prolonging the robot lifespan with proper inspection and maintenance at a fixed cost
- Maximizes productivity by identifying potential problems before they result in unscheduled downtime
- Includes below coverage for 2 years with option to renew each year thereafter:
 - Annual Wellness Visit for preventative maintenance
 - 100% coverage for all service labor and parts for repairs
 - Priority dispatch for Field Service Support
 - Premium Technical Support (24/7 access with priority status)
 - No travel costs for any on-site visit
 - Discounts on additional training for your team





	Coverage	Standard Warranty	Registered Robot	Complete Care
Year 1	Parts	•	•	•
	Labor	•	•	•
	Travel			•
	Annual Wellness Visit			•
	Priority Status	•	•	•
Year 2	Parts		•	•
	Labor		•	•
	Travel			•
	Annual Wellness Visit			•
	Priority Status		•	•



Safety Services

 Omron provides turn-key safety services from risk assessments to design and installation to address machine safety hazards. Be confident that your machines are properly safeguarded by partnering with a global safety expert.



- 1. Risk Assessment
- 2. Engineering Design
- 3. Implementation
- 4. Validation
- Protect your employees from unnecessary risks
- Maintain compliance with safety standards
- Avoid incident-related costs such as regulatory fines, downtime, legal fees and increased OSHA inspections
- Harness advanced safety technologies to preserve your productivity
- Partner with a global safety provider for consistent, world class support





