Industrial PC Platform NY-series Industrial Panel PC

NYP

CSM_NYP_DS_E_3_10

Works great, looks great.

Our NY industrial Panel PC enables operator and maintenance engineer to operate and interact more effectively with the machine, using powerful, tough and future-proof PC technology for visualization, data-handling, measuring and controlling. Omron engineers used the latest insights in design simplification to cut faults caused by complexity, while optimizing operator efficiency, maximizing uptime and reducing costs.

Features

- No internal cables in the PC part eliminates faults, maximizes uptime
- Unique simplified thermal design cuts downtime
- Powerful Intel® Core™ technology for optimum performance
- Optional NY Monitor Link interface for connectivity up to 100 m
- 12.1 and 15.4 inch industrial display
- Multi-touch projected capacitive touchscreen
- False touch detection (palm, water)
- Operator can wear gloves ✻

✻ When using gloves, ensure to use gloves that are functional with this touchscreen.

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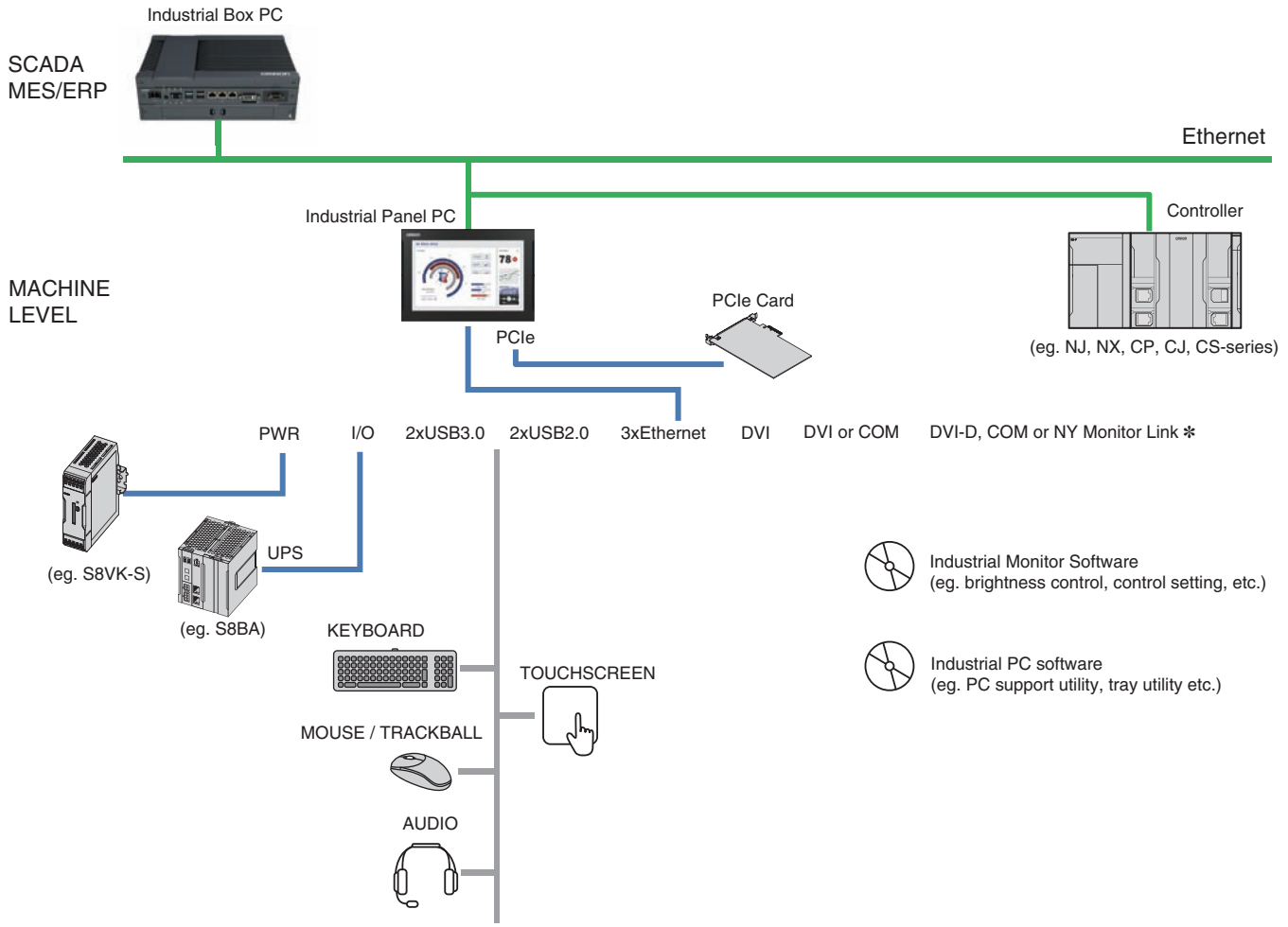
System Configuration



✻NY Monitor Link option: Connect monitor up to 100 m via standard Ethernet cable.

Model Number Structure

The purpose of this model number legend is to provide understanding of the meaning of specifications from the model number.
Models are not available for all combinations of code numbers.

NYP □□ - □ □ □ □ □ - □□ □ □ □ □ □ □

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Item	Description	Option / Description
1	Series name	NYP: NY- series Industrial Panel PC
2	Processor	17: Intel® Core™ i7-4700EQ4th generation CPU with fan unit for active cooling 25: Intel® Core™ i5-4300U4th generation CPU with fanless cooling 1C: Intel® Celeron® 2980U4th generation CPU with fanless cooling 35: Intel® Core™ i5-7300U7th generation CPU with fanless cooling 2C: Intel® Celeron® 3965U7th generation CPU with fanless cooling
3	Main memory	1: 2 GB, non-ECC 2: 4 GB, non-ECC 3: 8 GB, non-ECC 4: 16 GB, non-ECC C: 8 GB, ECC D: 16 GB, ECC
4	Expansion slots	0: No PCIe slot 1: 1 PCIe slot
5	Operating system	0: No operating system 1: Windows Embedded Standard 7 - 32 bit 2: Windows Embedded Standard 7 - 64 bit 3: Windows 10 IoT Enterprise LTSB - 64 bit
6	Storage	0: No disk 5: 64 GB, CFast MLC 6: 128 GB, CFast MLC 7: 256 GB, CFast MLC 8: 32 GB, SSD SLC 9: 64 GB, SSD SLC C: 320 GB, HDD D: 500 GB, HDD E: 1 TB, HDD K: 128 GB, SSD MLC
7	Optional interface	0: No optional interface 1: RS-232C 2: DVI-D 6: NY Monitor Link
8	Display size (diagonal)	12: 12.1 inch model, 1280 x 800 pixels, 24 bit full color 15: 15.4 inch model, 1280 x 800 pixels, 24 bit full color
9	Display ratio	W: Wide
10	Touchscreen	C: Projected Capacitive Touch type
11	Frame type	1: Aluminum frame, black
12	Design	0: Standard
13	Built-in options	0: None
14	Logo	0: OMRON 2: Customized logo ✻

✻ For Europe only. Please consult your OMRON representative for details.

Ordering Information

NY-series Industrial PC Platform

Recommended models

The industrial Panel PC has extended configuration possibilities to meet your requirements, below an overview of the most used and recommended models. Selecting one of the models below will bring the benefit of faster delivery times.
In case your preferred model is not listed below, please contact your Omron representative to discuss the possibilities.

Product name	Specifications						Model
	Display size	Operating system	CPU type	RAM memory (non-ECC type)	Storage size	Interface option	
Industrial Panel PC	12.1 Inch	Windows 10 IoT Enterprise LTSB - 64 bit	Intel® Core™ i7-4700EQ	8 GB	128 GB SSD type (MLC)	RS-232C	**NYP17-313K1-12WC1000**
			Intel® Core™ i5-4300U	8 GB	128 GB SSD type (MLC)	RS-232C	**NYP25-313K1-12WC1000**
			Intel® Core™ i5-4300U	8 GB	64 GB SSD type (SLC)	RS-232C	**NYP25-31391-12WC1000**
			Intel®Celeron™ 2980U	8 GB	128 GB SSD type (MLC)	RS-232C	**NYP1C-313K1-12WC1000**
		Windows Embedded Standard 7 - 64bit	Intel® Celeron™ 2980U	8 GB	128 GB SSD type (MLC)	RS-232C	**NYP1C-312K1-12WC1000**
	15.4 inch	Windows 10 IoT Enterprise LTSB - 64 bit	Intel® Core™ i7-4700EQ	8 GB	128 GB SSD type (MLC)	RS-232C	**NYP17-313K1-15WC1000**
			Intel® Core™ i5-4300U	8 GB	128 GB SSD type (MLC)	RS-232C	**NYP25-313K1-15WC1000**
			Intel® Core™ i5-4300U	8 GB	64 GB SSD type (SLC)	RS-232C	**NYP25-31391-15WC1000**
			Intel® Celeron™ 2980U	8 GB	128 GB SSD type (MLC)	RS-232C	**NYP1C-313K1-15WC1000**
		Windows Embedded Standard 7 - 64bit	Intel® Celeron™ 2980U	8 GB	128 GB SSD type (MLC)	RS-232C	**NYP1C-312K1-15WC1000**

Accessories

Optional Hardware

Product name	Specifications	Model
SD Memory Cards	Card type: SD Card Capacity: 2 GB Format: FAT16	HMC-SD291
	Card type: SDHC Card Capacity: 4 GB Format: FAT32	HMC-SD491
USB Flash Drives	Capacity: 2 GB	FZ-MEM2G
	Capacity: 8 GB	FZ-MEM8G
Storage Devices ✻1	Storage type: HDD Capacity: 320 GB	NY000-AH00
	Storage type: HDD Capacity: 500 GB	NY000-AH01
	Storage type: HDD Capacity: 1 TB	NY000-AH02
	Storage type: SSD SLC Capacity: 32 GB	NY000-AS00
	Storage type: SSD SLC (Apacer) Capacity: 64 GB	NY000-AS01
	Storage type: SSD SLC (Hagiwara) Capacity: 64 GB	NY000-AS03
	Storage type: SSD MLC (Innodisk) Capacity: 128 GB	NY000-AS04
	Storage type: SSD MLC Capacity: 500 GB	NY000-AS05
	Storage type: CFast MLC Capacity: 64 GB	NY000-AT00
	Storage type: CFast MLC Capacity: 128 GB	NY000-AT01
	Storage type: CFast MLC Capacity: 256 GB	NY000-AT02
USB Type-A to USB Type-B Cables	Cable length: 2 m USB 2.0 Minimum bend radius: 25 mm	FH-VUAB 2M
	Cable length: 5 m USB 2.0 Minimum bend radius: 25 mm	FH-VUAB 5M
DVI Cables	Cable length: 2 m Supports DVI-D Minimum bend radius: 36 mm	NY000-AC00 2M
	Cable length: 5 m Supports DVI-D Minimum bend radius: 36 mm	NY000-AC00 5M
Power Supply	• Output voltage: 24 VDC • Push-In Plus terminal blocks	S8VK-S□□□24
UPS ✻2	Output voltage during backup operation: 24 VDC ± 5%	S8BA
UPS Communication Cable	Cable length: 2 m Signals for • Signal output (BL, TR, BU, WB) • Remote ON/OFF input • UPS Stop Signal input (BS)	S8BW-C02

Note: Orders for NY000-AS02 are no longer accepted, as of November 30, 2018.
✻1. CFast Storage can be used only with the NYP35-□0, NYP2C-□0. Please contact your Omron representative to discuss the possibilities.
✻2. Revision number 04 or later.

The revision number of the UPS can be retrieved from the serial number label on the product and the product packaging.

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1 2 3 4

Item	Description
1	Product code
2	Product period and sequential number
3	Revision number
4	RoHS status

Spare Parts

The following spare parts for the Industrial Panel PC are available.

Product name	Specifications	Model
Battery	One battery is supplied with the Industrial Panel PC. The battery supplies power to the real-time clock. The battery is located inside the Industrial Panel PC. Service life: 5 years at 25°C	CJ1W-BAT01 ✻
Fan Unit	The Fan Unit is available for the Industrial Panel PC that has active cooling. Service life: 70,000 hours of continuous operation at 40°C with 15% to 65% relative humidity. Shelf life: 6 months This is the storage limitation with no power supplied.	NY000-AF00
Accessory Kit	Replacement kit containing all accesories supplied with Industrial Panel PC. • Power connector • I/O connector • Drive bracket for drive installation • 4 mounting screws for drive installation • PCIe Card support for PCIe Card installation • PCIe Card clip for PCIe Card installation	NY000-AK00

✻ Only for models with replaceable battery.

Installed Support Software

Item	Specifications
Industrial PC Support Utility	The Industrial PC Support Utility is a software utility to assist in diagnosing and resolving problems of the Industrial Panel PC. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial PC Tray Utility	The Industrial PC Tray Utility is a software utility that provides information about the current state of the Industrial PC, its related devices, and associated software. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial PC System API	The Industrial PC System API allows programmers to create programs that can retrieve information or set an indicator status of the Industrial Panel PC. The API makes use of the included IPC System Service to manage the hardware. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial Monitor Utility	The Industrial Monitor Utility provides a user interface to control settings and display details of connected Industrial Monitors. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial Monitor Brightness Utility	The Industrial Monitor Brightness Utility is a small software utility that allows you to control the brightness of the screen backlight of all connected Industrial Monitors. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial Monitor API	The Industrial Monitor API allows programmers to create applications that can control the hardware features and retrieve information from connected Industrial Monitors. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial PC Rescue Disk Creator	The Industrial PC Rescue Disk Creator creates a USB Rescue Disk which can be used to back-up and restore the Omron IPC Operating System. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.

General Specifications

Performance Specifications

Item			NYP17-□□□□	NYP25-□□□□	NYP1C-□□□□	NYP35-□1□□	NYP2C-□1□□	NYP35-□0□□	NYP2C-□0□□
Main system	CPU	CPU type	Intel® Core™ i7-4700EQ	Intel® Core™ i5-4300U	Intel® Celeron® Processor 2980U	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U
		Cores / Threads	4 / 8	2 / 4	2 / 2	2 / 4	2 / 2	2 / 4	2 / 2
		CPU base frequency	2.4 GHz	1.9 GHz	1.6 GHz	2.6 GHz	2.2 GHz	2.6 GHz	2.2 GHz
		Maximum turbo frequency	3.4 GHz	2.9 GHz	–	3.5 GHz	–	3.5 GHz	–
		Cache	6 MB	3 MB	2 MB	3 MB	2 MB	3 MB	2 MB
		Cooling details	Requires active cooling (fan)	Passive cooling (fanless)		Passive cooling (fanless)		Passive cooling (fanless)	
	Memory	Memory size ✻3	4, 8 or 16 GB	2, 4 or 8 GB	2, 4 , or 8 GB	4 or 8 GB	4 or 8 GB	8 or 16 GB	4 or 8 GB
		Memory type	DDR3L (non ECC)			DDR4 (non ECC)		DDR4 (non ECC)	
	Trusted platform module (TPM)		Available						
	Graphics controller		Intel® HD Graphics. Up to two independent screens.			Intel® HD Graphics. Up to two independent screens.		Intel® HD Graphics. Up to two independent screens.	
			Intel® HD Graphics 4600	Intel® HD Graphics 4400	Intel® HD Graphics	Intel® HD Graphics 620	Intel® HD Graphics 610	Intel® HD Graphics 620	Intel® HD Graphics 610
	Watchdog		Yes						

Item				NYP17-□□□□□	NYP25-□□□□□	NYP1C-□□□□□	NYP35-□1□□□	NYP2C-□1□□□	NYP35-□0□□□	NYP2C-□0□□□
Operating system	Windows OS			Windows Embedded Standard 7 - 32 bit Windows Embedded Standard 7 - 64 bit Windows 10 IoT Enterprise LTSB - 64 bit			Windows 10 IoT Enterprise - 64 bit		Windows 10 IoT Enterprise - 64 bit	
Storage devices	Drives ✻3	Hard Disk Drive		• 320 GB, 500 GB, 1 TB Serial ATA 3.0	• 320 GB Serial ATA 3.0		• 320 GB Serial ATA 3.0		N/A	
		Solid State Drive	SLC type	• 32 GB and 64 GB Serial ATA 3.1			• 64 GB Serial ATA 3.1		N/A	
			MLC type	• 128 GB Serial ATA 3.1					• 64 GB, 128 GB, 256 GB Serial ATA 3.1	
	Drive bays (HDD/SSD) ✻1			2	2	1	2	2	CFast slot	CFast slot
Connectors	Power connector			24 VDC						
	I/O connector			2 inputs (Power ON/OFF Input and UPS Mode Input) and 1 output (Power Status Output)						
	USB2.0 Type-A	Number of ports		2						
		Maximum current		500 mA						
		Maximum cable length		5 m						
	USB3.0 Type-A	Number of ports		2						
		Maximum current		900 mA						
		Maximum cable length		3 m						
	Ethernet connectors	Number of ports		3						
		Physical layer		10BASE-T, 100BASE-TX or 1000BASE-T						
	DVI-I connector	Video interface		Digital or analog	Digital only					
		Resolution		Up to 1,920 x 1,200 pixels at 60 Hz						
		Maximum DVI cable length		Dependent upon connected monitor type and resolution						
Optional connector (select one per system)	RS-232C			Standard DSUB9 connector (Non-Isolated)					N/A	
	DVI-D	Video interface		Digital only					N/A	
		Resolution		Up to 1,920 x 1,200 pixels at 60 Hz					N/A	
		Maximum DVI cable length		Dependent upon connected monitor type and resolution					N/A	
	NY Monitor Link	Video interface		Digital only						
		Resolution		1,280 x 800 pixels at 60 Hz						
		Connector type		RJ45						
		Cable shielding, type and max. length		S/FTP, Cat.6A, 100 m						
		USB data throughput		280 Mbps max.						
PCIe Card Slot	Configuration			X4 (4 lanes) up to Gen 3	X1 (1 lane) up to Gen 2		X2 (2 lanes) up to Gen 3		N/A	
	Card height			Standard height cards, 4.20 inches (106.7 mm) ✻2					N/A	
	Card length			Half length cards, 6.6 inches (167.65 mm)					N/A	
Battery	Model			CJ1W-BAT01			Non replaceable battery			
	Service life			5 years at 25°C			10 years at 40°C			
Fan unit	Model			NY000-AF00	No fan unit					
	Service life			70,000 hours of continuous operation at 40°C with 15% to 65% relative humidity	–					
LED				PWR, ERR, HDD, RUN						

✻1. Depending on the model one or two drives are supported.
✻2. Low profile cards, 2.536 inches (64.4 mm) are not supported.
✻3. Not all combinations are possible or standard available. Please contact your Omron representative to discuss the possibilities.

Display Specifications

Item			Specifications	
			12.1 Inch models	15.4 Inch models
Display	Display panel ✻1	Display device	TFT LCD	
		Screen size	12.1 inches	15.4 inches
		Surface treatment	Anti glare treatment	
		Surface hardness	Mohs scale: 5 - 6	
		Resolution	1,280 × 800 pixels at 60 Hz (horizontal × vertical)	
		Colors	16,770,000 colors	
		Effective display area	261 × 163 mm (horizontal × vertical)	331 × 207 mm (horizontal × vertical)
		View angles	Left: 60°, Right: 60°, Top: 60°, Bottom: 60°	
		Life	50,000 hours min. ✻2	
		Brightness adjustment	200 levels ✻3	
	Touch	Technology	Projected capacitive	
		Touch resolution	Touch accuracy 1.5% (4-5 mm)	
		Multitouch	Up to 5 simultaneous touches	
		Features	Water detection ✻4, hand palm rejection ✻5, gloves ✻6	
		Life	50,000,000 operations min.	
		EMC	Correct touchscreen operation is possible within allowable EMC immunity conditions	

✻1. There may be some defective pixels in the display. This is not a fault as long as the numbers of defective light and dark pixels fall within the following standard range: light and dark pixels 10 or less. (There must not be 3 consecutive light/dark pixels.)
✻2. This is the estimated time before brightness is reduced by half at room temperature and humidity.
The life expectancy is drastically shortened if used at high temperatures.
✻3. If the brightness is set to very dark, it causes flickering or the screen will be too dark to use.
✻4. If water is detected the touch functionality will not be available.
✻5. If a palm is detected that specific area is neglected.
✻6. The touchscreen can be operated when wearing gloves. Check correct usage of the gloves before using them.

Electrical Specifications

Item			NYP17-□□□□□	NYP25-□□□□□	NYP1C-□□□□□	NYP35-□1□□□	NYP2C-□1□□□	NYP35-□0□□□	NYP2C-□0□□□
CPU type			Intel® CoreTM i7-4700EQ CPU	Intel® CoreTM i5-4300U CPU	Intel® Celeron® 2980U CPU	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U
Rated power supply voltage			24 VDC, non-isolated						
Allowable power supply voltage range			20.4 to 28.8 VDC						
Grounding method			Ground to less than 100 Ω						
Inrush current			At 24 VDC: 12 A / 6 ms max. for cold start at room temperature						
Overvoltage category			JIS B3502 and IEC 61131-2: Category II						
EMC immunity level			IEC 61131-2: Zone B						
RTC accuracy			At ambient temperature of 55°C: -3.5 to +0.5 min error per month At ambient temperature of 25°C: -1.5 to +1.5 min error per month At ambient temperature of 0°C: -3 to +1 min error per month						
Power button life			100,000 operations						
Battery life			5 years at 25°C (for battery CJ1W-BAT01)			10 years at 40°C			
Fan life			8 years of continuous operation at 40°C	–	–	–	–	–	–
Power consumption ✻			–						
	Maximum power consumption including drives and expansions		132 W	93 W	84 W	84 W	66 W	76 W	58 W
	Maximum power consumption excluding drives and expansions		99 W	70 W	63 W	61 W	43 W	61 W	43 W
	Drives		–						
		HDD 320 GB	2 W					–	
		HDD 500 GB	2 W					–	
		HDD 1 TB	2 W					–	
		SSD SLC 32 GB	2 W					–	
		SSD SLC 64 GB	2 W					–	
		SSD MLC 128 GB	2 W					–	
		SSD MLC 500 GB	3 W					–	
		CFast MLC 64 GB	–					1 W	
		CFast MLC 128 GB	–					1 W	
		CFast MLC 256 GB	–					1 W	
	Expansions		–						
		USB	14 W max. ((2 x 500 mA at 5 V) + (2 x 900 mA at 5 V))						
		PCIe	15 W max.	5 W max.	5 W max.	5 W max.	5 W max.	-	-

Note: Refer to the *Industrial Panel PC User's Manual* (W555) for detail.

✻ The total power consumption is the sum of the power consumption of all items that are installed in your Industrial Box PC.
To guarantee S8BA UPS operation in combination with our IPC, the specified combination of UPS and power-supply must be used.

Item	Minimum power requirements	
Power supply	240 W	120 W
UPS	120 W	120 W

Components and functions

The intent behind our IPC platform is to empower engineers to become unstoppable in developing machines and factories that are better, faster and safer by giving them the freedom and flexibility to explore the opportunities provided by modern IT. In line with Omron's traditional quality standards, the Industrial Panel PC is designed to meet the demands of industrial users for maximum robustness and reliability.

Powerful CPU options
Three powerful CPU options provide high performance for various applications.

Fanless cooling for multiple CPU types
The Industrial Panel PC has passive cooling for multiple CPU types which means no moving parts and less maintenance effort.

Easy access to storage devices and the PCI Express Card
Adding or changing storage devices (HDD, SSD) and the PCI Express Card is fast and simple.

LED indicators

DVI-I video interface

3 1Gbps Ethernet ports

Built-in IO

4 USB ports

Built-in SD Memory Card slot

LCD touchscreen

Multi-touch functionality
Up to 5 simultaneous touches are supported for complex functions.

Environmental Specifications

Item		Specifications
Operation environment	Ambient operating temperature ✻1	0 to 55°C
	Ambient storage temperature ✻1	-20 to 70°C
	Ambient operating humidity ✻1	10% to 90% with no condensation
	Ambient storage humidity ✻1	10% to 90% with no condensation
	Operating atmosphere	No corrosive gases
	Altitude	2,000 m max.
	Noise resistance (during operation)	Conforms to IEC61000-4-4, 2kV (power lines)
	Vibration resistance (during operation)	The vibration resistance depends on the storage device(s): • For a Panel PC with only SSD storage devices: 5 to 8.4 Hz with 3.5 mm single amplitude and 8.4 to 150 Hz with 9.8 m/s^2 for 10 times each in X, Y and Z directions. Conforms to IEC 60068-2-6. • For a Panel PC with one or more HDD storage devices the Panel PC must be installed in a vibration free environment. ✻2
	Shock resistance (during operation)	Conforms to IEC 60068-2-27. 147 m/s^2, 3 times in each X, Y and Z directions
	Installation method	Mount on panel
	Degree of protection	Front of Monitor: IP65 ✻3
	Pollution degree	2 or less: Conforms to JIS B3502 and IEC 61131-2.
Applicable standards ✻4		EU Directives: EMC Directive 2014/30/EU (EN 61131-2) and RoHS Directive KC Registration, RCM, cULus, EAC

✻1. The allowed ambient operating temperature and ambient humidity depend on product type, CPU type, mounting orientation, and storage device type.

✻2. A Panel PC with one or more HDD storage devices should not be used in applications subject to vibration.
Examples of applications subject to vibration:
- AGV (Automated Guided Vehicles)
- Rail vehicle
- Stacker crane
- Elevator
- Tableting machine
- Connector pin assembling machine
- Bending machine

Ensure your Panel PC with HDD does not vibrate. When in doubt use a Panel PC with SSD storage devices.

✻3. The Panel PC may not operate properly in locations subjected to oil splashes for extended periods of time.

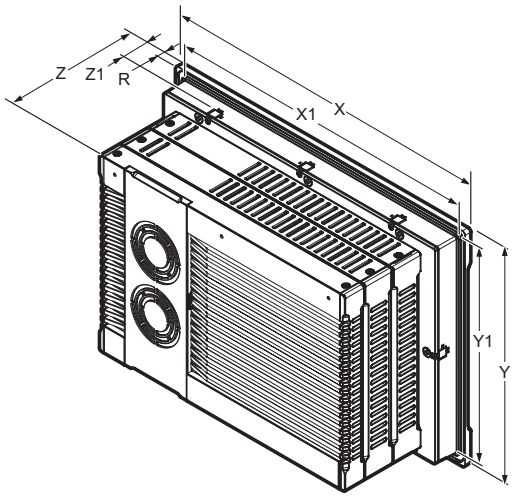
✻4. Refer to the OMRON website (www.ia.omron.com) or contact your OMRON representative for the most recent applicable standards for each model.

Storage Device Specifications

Item	Specifications										
Model	NY000-AS00	NY000-AS01	NY000-AS03	NY000-AS04	NY000-AS05	NY000-AH00 ✻1	NY000-AH01 ✻1	NY000-AH02 ✻1	NY000-AT00	NY000-AT01	NY000-AT02
Capacity	32 GB	64 GB	64 GB	128 GB	500 GB	320 GB	500 GB	1 TB	64 GB	128 GB	256 GB
Type	SSD (SLC)		SSD (SLC)	SSD (MLC)	SSD (MLC)	HDD	HDD	HDD	CFast (MLC)	CFast (MLC)	CFast (MLC)
S.M.A.R.T. support	Yes										
Rotation speed	–	–	–	–	–	5,400 r/min			-	-	-
Interface	Serial ATA 3.1					Serial ATA 3.0			Serial ATA 3.1		
Sustained standard read speed	Up to 160 MB/s	Up to 160 MB/s	Up to 500 MB/s	Up to 530 MB/s	Up to 415 MB/s	–	–	–	Up to 530 MB/s	Up to 530 MB/s	Up to 530 MB/s
Sustained standard write speed	Up to 145 MB/s	Up to 150 MB/s	Up to 370 MB/s	Up to 190 MB/s	Up to 200 MB/s	–	–	–	Up to 100 MB/s	Up to 190 MB/s	Up to 210 MB/s
Operating temperature	0 to 70°C					5 to 55°C	5 to 55°C	0 to 60°C	-40 to 85°C		
Operating humidity	10% to 95% (with no condensation)		10% to 85% (with no condensation)	10% to 95% (with no condensation)		• 10% to 95% (with no condensation) • 29°C wet-bulb temperature max.			10% to 95% (with no condensation)		
Storage temperature	-40 to 100°C		-40 to 90°C	-55 to 95°C	-55 to 95°C	-40 to 65°C			-55 to 95°C		
Storage humidity	10% to 95% (with no condensation)					• 8% to 90% (with no condensation) • 40°C wet-bulb temperature max.			10% to 95% (with no condensation)		
Life	1,500 TB written	3,000 TB written	1900 TB written	208 TB written	154 TB written	Approximately 5 years or 20,000 powered-ON hours (whichever comes first) under the following conditions: • 25°C at 101.3 kPa • Less than 333 powered-ON hours/month ✻2 • Less than 20% operation while powered-ON ✻3 • Less than 1.30 x 106 seeks/month	Average Annualized Failure Rate (AFR): 0.50% Under the following conditions: • Case Temperature 40°C • Power on Hours (POH) ≤ 3120		125 TB written	208 TB written	417 TB written

Note: Orders for NY000-AS02 are no longer accepted, as of November 30, 2018.
✻1. For a Panel PC with an HDD: this device can only be installed in a vibration free environment only. (NYP)
✻2. Powered-ON hours include sleep and standby modes.
✻3. Operation includes seeking, writing, and reading functions.

Dimensions



Item	Panel					
	12.1 Inch			15.4 Inch		
	NYP17-□□□□□ NYP25-□□□□□ NYP1C-□□□□□	NYP35-□1□□□ NYP2C-□1□□□	NYP35-□0□□□ NYP2C-□0□□□	NYP17-□□□□□ NYP25-□□□□□ NYP1C-□□□□□	NYP35-□1□□□ NYP2C-□1□□□	NYP35-□0□□□ NYP2C-□0□□□
Panel preparation dimensions	Cutout Width X1 = 314^{-0}_{+1} mm Cutout Height Y1 = 216^{-0}_{+1} mm			Cutout Width X1 = 383^{-0}_{+1} mm Cutout Height Y1 = 259^{-0}_{+1} mm		
Panel thickness range ✻	Panel thickness range Z1 = 1.6 to 6.0 mm			Panel thickness range Z1 = 1.6 to 6.0 mm		
Dimensions	Width X = 332 mm Height Y = 234 mm Depth Z = 121 mm	Width X = 332 mm Height Y = 234 mm Depth Z = 105 mm	Width X = 332 mm Height Y = 234 mm Depth Z = 71 mm	Width X = 401 mm Height Y = 277 mm Depth Z = 121 mm	Width X = 401 mm Height Y = 277 mm Depth Z = 105 mm	Width X = 401 mm Height Y = 277 mm Depth Z = 71 mm
Monitor thickness in front of panel	Rim thickness R = 8.0 mm			Rim thickness R = 8.0 mm		
Weight	6.1 kg	5.6 kg	4.7 kg	7.2 kg	6.6 kg	5.6 kg

✻ The minimum panel thickness depends on the panel material.

Recommended Related Products

Industrial Box PC
NY-series

The Industrial Box PC is designed to meet the specific needs of the industrial environment. Design simplification and future-proof architecture minimize the risk of failure.

Industrial Monitor
NY-series

The Industrial Monitor is of key importance at the interface between operator and system. The Industrial Monitor is efficient, effective and highly visible with an attractive design.

UPS
S8BA-series

The OMRON S8BA UPS protects the Industrial PC from power failures, voltage variations and instantaneous voltage drops.

Related Manuals

The following manuals are related. Use these manuals for reference.

Manual name	Cat. No.	Model numbers	Application	Description
Industrial Box PC User's Manual	W553	NYB1E-□1□□□ NYB17-□1□□□ NYB25-□1□□□ NYB1C-□1□□□ NYB35-□□□□□ NYB2C-□□□□□	Learning all basic information about the Industrial Box PC. This includes introductory information with features, hardware overview, software overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Box PC.	An introduction to the Industrial Box PC is provided along with the following information: • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
NY-Series Industrial Box-PC without OS User's Manual	W586	NYB1E-□1□□□ NYB17-□10□□ NYB25-□10□□ NYB1C-□10□□ NYB35-□□0□□ NYB2C-□□0□□	Learing about the Omron Industrial PC functionality without an installed Operating System	An introduction to the Industrial Box PC is provided along with the following information: • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
Industrial Monitor User's Manual	W554	NYM15WC10□□ NYM12WC10□□	Learning all basic information about the Industrial Monitor. This includes introductory information with features, hardware overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Monitor.	An introduction to the Industrial Monitor is provided along with the following information: • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
Industrial Panel PC User's Manual	W555	NYP17-□1□□□-15WC100□ NYP17-□1□□□-12WC100□ NYP25-□1□□□-15WC100□ NYP25-□1□□□-12WC100□ NYP1C-□1□□□-15WC100□ NYP1C-□1□□□-12WC100□ NYP35-□□□□□-15WC100□ NYP35-□□□□□-12WC100□ NYP2C-□□□□□-15WC100□ NYP2C-□□□□□-12WC100□	Learning all basic information about the Industrial Panel PC. This includes introductory information with features, hardware overview, software overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Panel PC.	An introduction to the Industrial Panel PC is provided along with the following information: • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
NY-Series Industrial Panel-PC without OS User's Manual	W587	NYP17-□10□□-15WC100□ NYP17-□10□□-12WC100□ NYP25-□10□□-15WC100□ NYP25-□10□□-12WC100□ NYP1C-□10□□-15WC100□ NYP1C-□10□□-12WC100□ NYP35-□□0□□-15WC100□ NYP35-□□0□□-12WC100□ NYP2C-□□0□□-15WC100□ NYP2C-□□0□□-12WC100□	Learing about the Omron Industrial PC functionality without an installed Operating System	An introduction to the Industrial Panel PC is provided along with the following information: • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
UPS S8BA User's Manual	U702	S8BA	Learning the information that is necessary to use the Uninterruptible Power Supply (UPS) Unit.	An introduction to the UPS is provided along with the following information: • Overview • Preparation • Installation and Connection • Check and Start Operation • Maintenance and Inspection • Shutdown Processing • I/O Signal Functions • Troubleshooting

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