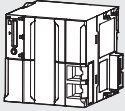


Ordering Information

International Standards

- The standards are abbreviated as follows: UC1: cULus(Class I Division 2 Products for Hazardous Locations), N: NK, L: Lloyd, CE: EU Directives, RCM: Regulatory Compliance Mark and KC: KC Registration.
- Contact your OMRON representative for further details and applicable conditions for these standards.

Product Name	Specifications				Current consumption (A)		Model	Standards
	I/O capacity / Maximum number of configuration Units (Expansion Racks)	Program capacity	Memory capacity for variables	Number of motion axes	5 VDC	24 VDC		
NJ501 CPU Units <div>OPC UA</div>	2,560 points / 40 Units (3 Expansion Racks)	20 MB	2 MB: Retained during power interruption	64	1.90	—	NJ501-1500	UC1, N,L, CE, RCM, KC
			4 MB: Not retained during power interruption	32			NJ501-1400	
				16			NJ501-1300	

Specifications

For details, refer to the data sheet of the Machine Automation Controller NJ/NX-Series.

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Cat. No. P123-E1-01 0917

NJ-series Machine Automation Controller CPU Unit

NJ501-1□00

International standard for directly connecting automation systems and IT systems

OPC UA



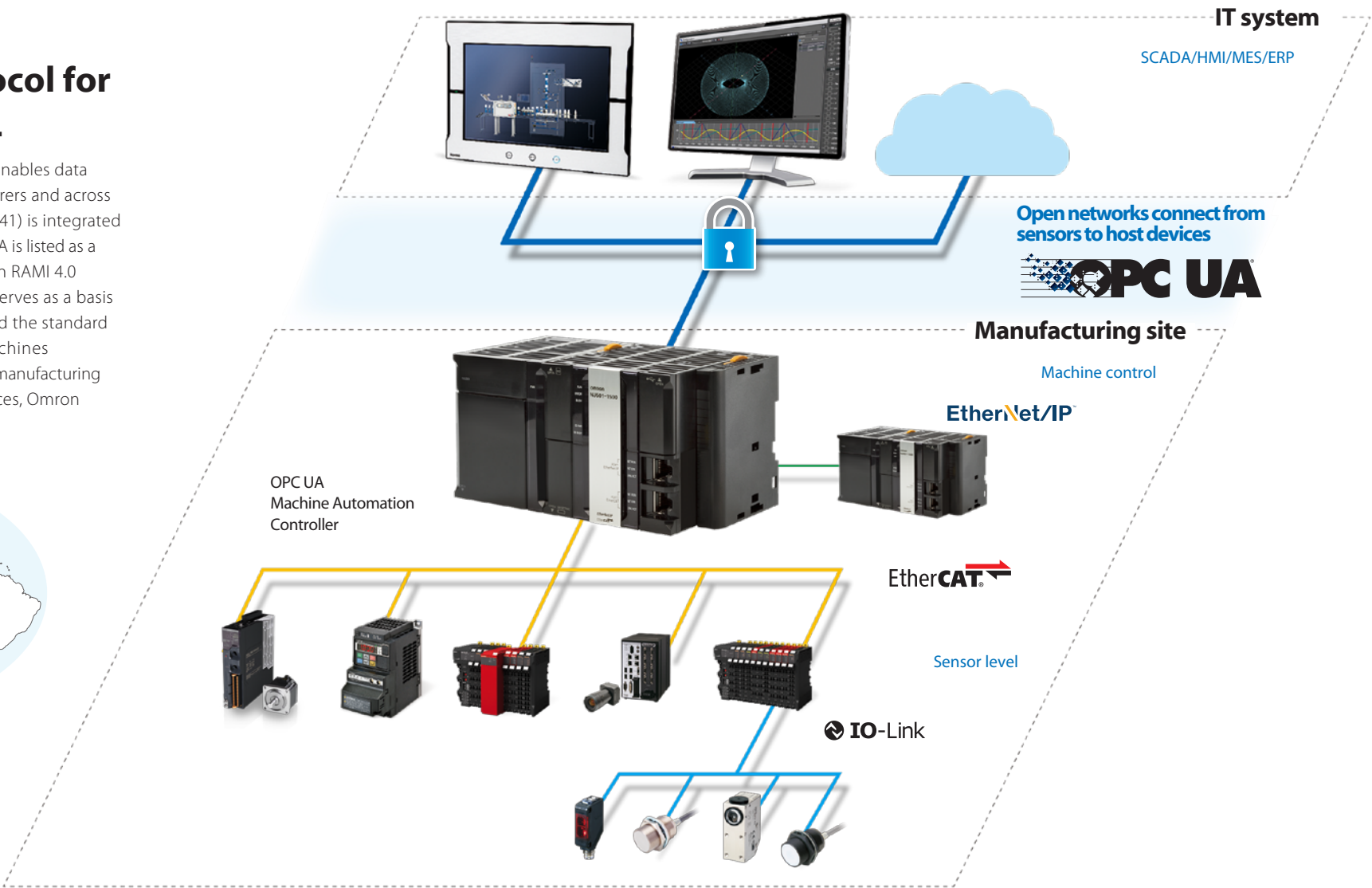
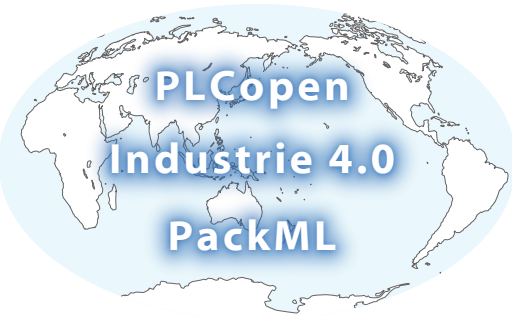
- Reliable international communication protocol
- Secure communication environment using authentication and encryption technologies
- Easy setup to directly connect to host system



# Reliable, secure, easy - International standard communication protocol OPC UA directly connects automation and IT

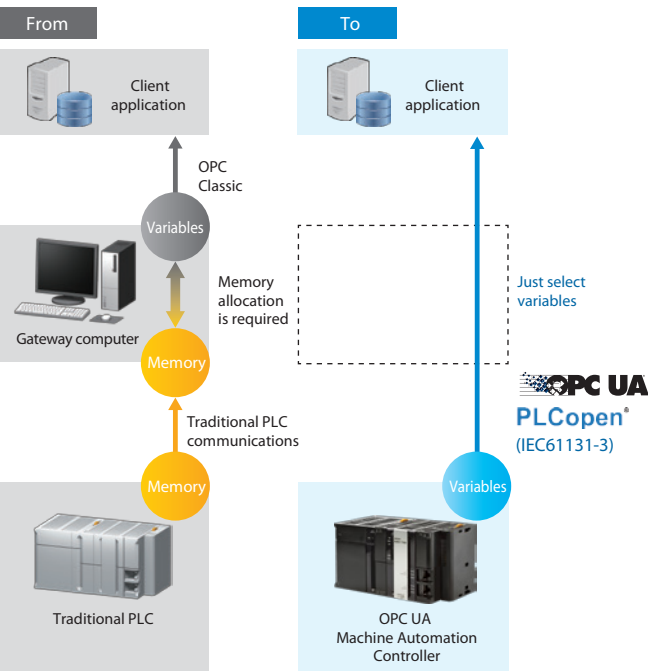
## Reliable IEC communication protocol for Industrie 4.0 and PackML

OPC UA is an industrial communication protocol that enables data exchange between products from different manufacturers and across operating systems. This international standard (IEC 62541) is integrated with the IEC 61131-3 PLC programming standard. OPC UA is listed as a recommendation for the communication technology in RAMI 4.0 (Reference Architecture Model Industrie 4.0) and also serves as a basis for the packaging standard PackML (ANSI/ISA-TR88) and the standard for exchange of data between injection molding machines (EUROMAP 77). The adoption of this open standard for manufacturing machines is increasing worldwide. In such circumstances, Omron added an OPC UA interface to the NJ501-□□□□.



## Easy Simple connection to host system

A gateway computer is required to connect the traditional PLC to the host system. The user must register variables and allocate memory to them. Omron's OPC UA CPU Unit eliminates the need for a computer. Just select variables to directly connect the controller to the host system.



## Secure Authentication and encryption technologies

Security is a crucial issue for connection between industrial automation systems and the host IT system, remote access maintenance, and use of the future internet. OPC UA security is based on recognized standards that are also used for secure communication in the internet and satisfies the three security requirements: confidentiality, integrity, and availability. Integrity by digitally signing the messages and confidentiality by encrypting the messages ensure secure connection between automation systems and IT systems.



### What is OPC UA (OPC Unified Architecture)?

- An interoperability standard for the secure and reliable exchange of data in the industrial automation space and in other industries
- An OS and hardware independent service-oriented architecture
- Secure connection between higher-level systems like MES or ERP and automation systems at production floor



Omron is contributing to the distribution of the OPC technology since OPC Foundation was established.  
OPC Foundation <https://opcfoundation.org/>