

NU-EP1

Communication Unit EtherNet/IP™ Compatible



SPECIFICATIONS

Model		NU-EP1
Name		EtherNet/IP™ Compatible Network Unit
Ethernet Specifications	Compliant standards	IEEE802.3 (10BASE-T), IEEE802.3u (100BASE-TX), IEEE802.3af (c, Class 3)
	Transmission rate	10 Mbps (10BASE-T), 100 Mbps (100BASE-TX)
	Transmission media	STP cable or Category 3 or higher UTP cable (10BASE-T) ^{*1} STP cable or Category 5 or higher UTP cable (100BASE-TX)
Ethernet	Maximum cable length	100 m (distance between the unit and Ethernet switch)
EtherNet	Max. number of connection stages	4 (10BASE-T) 2 (100BASE-TX) ^{*2}
EtherNet/IP™	Compliant functions	Cyclic communication Compatible with UCMM and Class 3 messaging (Explicit messaging)
	Number of connections	64
	RPI (Transmission cycle)	0.5 to 10,000 ms (in units of 0.5 ms)
	Tolerable communication bandwidth for cyclic communication	6,000 pps
	Message communication	Supports UCMM, Class 3
	Conformance test	Compatible with Version A7
Sensor connection	Connectable sensors	Sensor amplifiers with N-bus support ^{*3}
	Number of connectable units	Up to 16 units ^{*4}
	Power supply	Power is supplied from the unit via a sensor amplifier connection connector.
	Allowable passing current	Total 1,200 mA or less ^{*5}
	Power during PoE power receiving	Supply voltage: 24 V ±10 %, supply current: 360 mA or less ^{*6,7}
Indicator lamp		Link/activity indicator (LINK/ACT): green LED, module status indicator (MS): 2-color (green and red) LED, network status indicator (NS): 2-color (green and red) LED, sensor communication indicator (N-bus): 2-color (green and red) LED
Power voltage		24 VDC ±10 %, ripple (P-P) 10 % or less (with power supply connector) 48 VDC (Max. 57 VDC) (During PoE power receiving)
Power consumption		1,500 mW or less (60 mA max. at 24 V) ^{*8}
Environmental resistance	Pollution degree	2
	Ambient temperature	-20 to +55 °C (No freezing)
	Relative humidity	35 to 85 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm, 2 hours in each of the X, Y, and Z directions
Material		Main unit case and dust cover: polycarbonate, power supply connector: polyamide (plug), PBT (socket)
Accessories		Instruction manual, power connector, 2 end units
Weight		Approx. 80 g (including connectors)

^{*1} When using the power PoE power receiving function, use the STP cable or Category 5 or higher UTP cable. 2. The number of connectable units is not limited when using a switch.

^{*2} When using the switch, there is no limit on the number of units that can be connected.

^{*3} "N-bus" is the name of KEYENCE's wiring-saving system for sensor amplifiers.

^{*4} Depends on the sensor amplifiers connected. 5. Value for the current which can be supplied to this unit or to a sensor amplifier unit connected to this unit.

^{*5} This is the current that can be supplied to the main unit or to the sensor amplifier connected to the main unit.

^{*6} Varies according to the working ambient temperature. (-20 to 45 °C: 360 mA or less, 45 to 50 °C: 260 mA or less, 50 to 55 °C: 140 mA or less)

^{*7} Power which can be supplied to the sensor amplifier when using the PoE power receiving function. 7

^{*8} Current to be supplied to the connected sensor amplifier is not included.

Dimensions

* Download CAD file or product manual for larger image/text and more detail.

NU-EP1

