



LJ-X8000E
2D controller



*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

Specifications

Model		LJ-X8000E*1
Head input		Up to 2 head units Compatible with LJ-X8000 Series heads and LJ-V7000 Series heads *When using 2 units, heads A and B are the same model.
Sampling cycle (trigger interval)		[2D mode] Maximum speed of 1 kHz (1 ms) *2 [3D mode] -
Number of registered inspection settings		Up to 1000 (depending on SD card capacity and setting contents) for each of SD cards 1 and 2. External switching is possible
Master profile / number of reference images		Maximum 200 per setting per head (depends on SD card capacity)
Memory card		• SD card slot × 2 • Supports OP-87133 (512 MB), CA-SD1G (1 GB), CA-SD4G (4 GB), CA-SD16G (16 GB) *In the SD1 slot, CA-SD4G is equipped as standard for 8000, and CA-SD1G is equipped as standard for 8000E
Number of tools		100/setting (of those, 20 are for misalignment correction)
Interface	Control input	20 points (input terminal block: 5 points, parallel I/O: 15 points)
	Control output	28 points (output terminal block: 6 points, parallel I/O: 22 points) Photo MOSFET*3
	RS-232C	• Value output and control I/O (exclusive use with PLC link using an RS-232C port) • Supports baud rates up to 230,400 bps
	PLC link	• Value output using Ethernet port or RS-232C port, and control I/O (Exclusive use with EtherNet/IP™ and PROFINET. When using an RS-232C port, exclusive use with RS-232C no-procedure communication)
	Ethernet	• Value output and control I/O • In addition to the above functions, can upload/download inspection settings, perform various simulations, send/receive various data including profile and image data, and be used with remote connection programs via KEYENCE PC application software • Supports FTP client and FTP server functions • Supports VNC server functions (for non-PC clients, only displaying the monitor screen is supported) • Supports BOOTP functions • 1000BASE-T/100BASE-TX/10BASE-T • Supports jumbo frames (when connected to any of CB-NEC20E/NEP20E/NPN20E)
	USB	• Can output values (3D mode only), upload/download inspection settings, perform various simulations, send/receive various data including profile and image data, and be used with remote connection programs via KEYENCE PC application software • Dedicated USB 2.0
	EtherNet/IP™	• Can input/output numerical values and perform control I/O using the Ethernet port or the optional EtherNet/IP™ unit CB-NEP20E (Cannot be used with PLC Link, PROFINET, and EtherCAT®) • Supports cyclic communication (max. 1436 bytes) and message communication • Maximum number of connections: 32 (Ethernet port)/1: Exclusive Owner, 4: Input Only (CB-NEP20E)

		<ul style="list-style-type: none"> Complies with Version.CT15 (Ethernet port)/CT17 (CB-NEP20E) conformance test
	PROFINET	<ul style="list-style-type: none"> Can input/output numerical values and perform control I/O using the Ethernet port or the optional PROFINET unit CB-NPN20E (Cannot be used with PLC Link, EtherNet/IP™, and EtherCAT®) Supports cyclic communication (max. 1408 bytes) (Ethernet port) / 1252 bytes (CB-NPN20E) Supports acyclic communication (recorded data) Complies with Conformance Class A (Ethernet port) / C (CB-NPN20E)
	EtherCAT®	<ul style="list-style-type: none"> Can output numerical values and perform control I/O by connecting the optional EtherCAT® unit CB-NEC20E (Cannot be used with PLC link, EtherNet/IP™, and PROFINET) Supports cyclic communication (process data object communication) (Input: Max. 536 bytes/Output: Max. 532 bytes) Supports acyclic communication (mailbox communication) Supports CoE Explicit Device Identification Complies with V2.2.10 and V2.2.1.0 conformance test
	Mouse	Various menus can be controlled via the dedicated mouse (included with the controller)
	SNTP	Automatic correction of date and time for this unit is possible by connecting to an SNTP server
	USB HDD	By connecting an HDD (max. 2 TB) to the dedicated USB port (supports USB 3.0, bus-powered, rated output: 900 mA), profile, image and other data can be output
	Monitor output	Analog RGB output, XGA 1024 × 768 (24-bit color, 60 Hz)
Encoder input		1 port: combination RS-422 line-driver output (with 5 V output: maximum 150 mA) open collector output (compatible with 5 V, 12 V, 24 V)
Response frequency	RS-422	Single phase / Z phase: 1.6 MHz, 2 phase / 1x: 1.6 MHz, 2 phase / 2x: 3.2 MHz, 2 phase / 4x: 6.4 MHz
	Open collector (OC)	Single phase / Z phase: 100 kHz, 2 phase / 1x: 100 kHz, 2 phase / 2x: 200 kHz, 2 phase / 4x: 400 kHz
Laser ON input		Non-voltage input (Shorted with short pin when shipped from factory)
Cooling fan		Provided
Minimum display unit		0.1 μm 0.000004", 0.01°, 0.00001 mm²
Language		Switchable between English, Japanese, Simplified Chinese, Traditional Chinese, Korean, German, French, Italian, Thai, Czech, Hungarian, and Polish
Ratings	Power voltage	24 V DC ±10%
	Maximum current consumption	3.3 A
Environmental resistance	Ambient temperature	0 to +45°C 32 to +113°F (DIN rail mounting) / 0 to +40°C 32 to +104°F (base surface mounting)
	Relative humidity	85% RH or less (no condensation)
Weight		Approx. 2500 g

*1 3D mode cannot be used with the LJ-X8000E.

*2 When the measurement range is narrowed in accordance with the binning settings.

*3 Positive common connection is supported for NPN input devices, and negative common connection for PNP input devices.

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

3mm hex socket head cap screw
M4 0.7mm thread

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M4 0.7mm thread

192.2

171.5

130.2

158

0

19.3

141.6

DIN

35.8

83.3

65.3

124.6

0.0M4
Depth: 6

56.2

35

84

122

311.8