IX-H2050

Sensor amplifier expansion unit

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

Specifications

Model			IX-H2050
Main unit / expansion unit			Expansion unit
Display	Min. display unit	Z axis	10 µm *1
		X axis	50 µm *1
	Display range	Z axis	±999.99 to ±999 mm 39.33" (with 4 selectable steps) *1
		X axis	±999.95 to ±999 mm 39.33" (with 4 selectable steps) *1
Tools	Scan mode		Height, Step, Average height, Pin height, MAX/MIN, Height area, Monochrome area, Width, Step calculation, Thickness calculation, Position adjustment, 1-axis adjustment, 2-axis adjustment (Max. number of settings) Judgment: 16 tools, Position adjustment: 1 tool*2
	Line mode		Height (Ave./Max./Min.), Step (Ave./Max./Min.), Edge position, Width/diameter, Step/width calculation, Thickness calculation, Position adjustment, Tilt adjustment (Max. number of settings) Judgment: 16 tools *3, Position adjustment: 1 tool, Tilt adjustment: 1 tool*2
Other functions	Common		Zero/offset, Operating threshold adjustment, 2-point calibration, Measurement direction, Position correction NG measurement, Zero/offset recording, Capture mode (HDR), Sensor date/time information addition, N.O./N.C. switching, I/O monitor, Automatic brightness adjustment, Lighting (ON/OFF), Total judgment conditions, NPN/PNP switching, Simultaneous main unit/expansion unit input, Mutual interference prevention, Security
	Scan mode		Measurement range, Measurement position (small/standard/large), Measurement mode, Measurement noise elimination, Imaging mode (high gain), Tilt correction (fixed or real-time correction), Glare removal, Trigger input (internal/external), Trigger interval, Trigger delay, Trigger error, Monochrome histogram, Area height histogram, Fixed reference area, Mask outline, Rotation range, Height image display on tool setting screen, Scaling function
	Line mode		Average count, Laser position adjustment, Timing input, Head tilt correction (fixed only), Ambient light removal for measurement, HOLD function, Alarm setting, Measurement method (Ave./Max./Min.), Laser sensitivity adjustment, Averaging filter, Median filter, X-axis median filter
Input	Input		Switchable between non-voltage input and voltage input For non-voltage input: ON voltage 2 V or lower, OFF current 0.1 mA or lower, ON current 2 mA (short circuit) For voltage input: Maximum input rating 26.4 V, ON voltage 18 V or higher, OFF current 0.2 mA or lower, ON current 2 mA (for 24 V)
	Number of inputs		8 (IN1 to IN8)
	Function		IN1: External trigger ↑↓ / Timing input, IN2 to IN8: Enable by assigning optional functions Assignable functions: Program switching, Laser emission stop, Zero/offset (batch), Reset (error only), Reset (judgment value only) Reset (judgment value and error)
Output	Output		Open collector output; NPN/PNP switchable, N.O./N.C. switchable For open collector NPN output: Maximum rating of 26.4 V, 50 mA (20 mA when linked to an expansion unit), residual voltage of 1.5 V or less

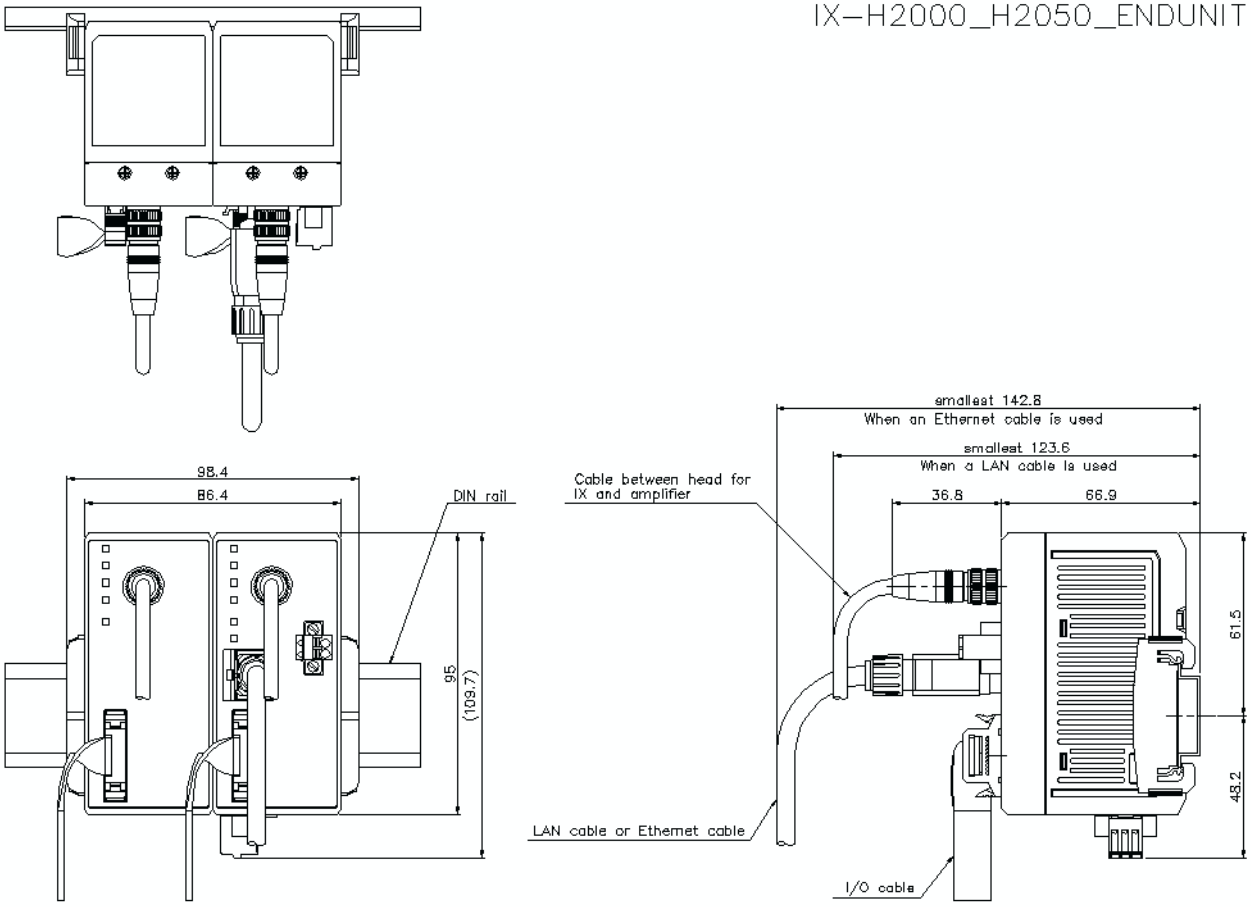
			For open collector PNP output: Maximum rating of 26.4 V, 50 mA (20 mA when linked to an expansion unit), residual voltage of 2 V or less
	Number of inputs		10 (OUT1 to OUT10)
	Function		Enable by assigning the optional functions Assignable functions: Total judgment result (All OK/Any OK/NG), Run, Busy, Error, Position adjustment result, Tilt adjustment result, Result of the logical operation of each tool, Monochrome area / Height area tool result (OK/NG), Height / Step / Max./Min. / Calculation tool result (OK/NG/HIGH/LO), Alarm
Analog voltage output			Not available
Analog current output			
Number of programs			32
Statistical information			Scan mode: Measured value / Degree of similarity (Max., Min., Ave.), Processing time (Latest, Max., Min., Ave.), Count (Number of OKs / Number of NGs / Number of triggers) Line mode: Measured value / Degree of similarity (Max., Min., Ave.), Count (Number of OKs / Number of NGs / Number of triggers) *1 *4
Detection history	Saved history	Scan mode	50 (FTP/SFTP client function: Enabled/High-resolution mode: Enabled) 80 (FTP/SFTP client function: Enabled/High-resolution mode: Disabled) 70 (FTP/SFTP client function: Disabled/High-resolution mode: Enabled) 100 (FTP/SFTP client function: Disabled/High-resolution mode: Disabled) *5
		Line mode	400 (FTP/SFTP client function: Enabled/High-resolution mode: -) 500 (FTP/SFTP client function: Disabled/High-resolution mode: -) *5
	Save conditions		Selectable between NG only and All *5
Image data transmission (FTP/ SFTP client function)	Destination		FTP/SFTP server
	Method		Selectable between bmp, jpeg, and txt
	Conditions		4 conditions Selectable between All, Total judgment result (OK/NG), Result of each tool (OK/ (NG and ALM)), and Result of the logical operation of each tool (OK/NG)
Ethernet	Standard		Not available *6
	Connector		
Interface compatibility			CC-Link, DeviceNet®, EtherNet/IP™, EtherCAT®, RS-232C, BCD output, TCP/IP non-procedural communication *7
Number of connectible units			Main units: 1, Expansion units: 1, Communication units (DL): 1
Ratings	Power voltage		Supplied from main unit
	Current consumption		Max. 1.9 A or less (With main unit only: 0.8 A or less, With unit expansion: 1.9 A or less) (Excluding output load) *8
Environmental resistance	Ambient temperature		0 to +50°C 32 to 122°F (No freezing)
	Relative humidity		35 to 85% RH (No condensation)
Material			Main unit case: PC / Power connector: PA, POM / Analog output connector: PA, POM / I/O connector: PA / Head connector: Zinc + Ni plating, PA / Ethernet connector: Copper alloy + Ni plating / Rear heat sink: Aluminum / Main unit rear DIN rail fixing tab: POM / Nameplate: PC
Weight			Approx. 190 g

*1 For displaying on an IX Series control panel or PC software.
*2 Configurable for each program.
*3 Up to 8 tools can be used for the diameter tool only.
*4 When sample hold (edge), peak/bottom/P-P hold (level/edge) is set.
*5 Saves to the sensor amplifier's internal memory. Detection history saved inside the sensor amplifier can be backed up to a PC using the USB memory stick connected to the IX Series control panel or PC software.
*6 For connection to an IX Series control panel or PC software. The RJ45 connector on the main unit is used for connecting to the expansion unit.
*7 When a DL Series device is used. Contact KEYENCE for information on other interfaces.
*8 Includes a DL Series communication unit.

Dimensions

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

IX-H2000_H2050_ENDUNIT



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