

PC-10J

Simplified defect detection device suitable at inspection line by facilitated inspection



Overview

- This device can execute loop control, edge positioning control, and width measuring with non-contact method by connecting JB series line sensor to the device.
- Pixel number of licenser corresponding to shielded state of measuring objected substance is measured and the result is outputted in analogue current and analogue voltage.
- Also output voltage is digitally outputted in 12-bit. (Output voltage is digitally outputted in 11-bit when TL-2048SJ/HJ is connected.)

Features

- Two analogue output systems are provided: one is current output system and another is voltage output system.
- Meter is provided to monitor current output.
- There are three measuring modes are available: first is falling edge output at light shielding, second is startup output at light shielding, and third is overall output at light shielding.
- Signal due to dust, etc. can be removed.
- Measuring area can be set.
- Alignment display is provided to make matching with optical axis of camera and projector.
- Calibration function is provided to check analogue output easily.
- Digital data output is possible.

Resolving power

Bit number and analogue output of camera will be as following.

Camera bit number	Analogue minimum	Analogue maximum	Resolving power	Per bit
2048	I = 4.00mA V = 0.00V	I = 19.99mA V = 9.99V	1/2048	0.0078mA/bit 0.0049V/bit
5000 *2	I = 4.00mA V = 0.00V	I = 20.00mA V = 10.00V	1/4096	0.0039mA/bit 0.0024V/bit

*1. Analogue value per one bit is calculated value and significant figure is neglected. Use the figure as reference

*2. Measuring area is automatically set and measuring is made within the range of maximum 4096 pixels among pixel of 5000.

Specifications

Connection possible licensor camera	TL-2048SJB, TL- 2048HJB TL-5000JB	Camera is set to external clock and external synchronization
Clock supplied to camera	6 MHz	
Scanning synchronous supplied to camera	0.2ms (5KHz) <input type="checkbox"/> 9.9ms (101KHz) <input type="checkbox"/>	Setting is possible every 0.1ms using DIPSW.
Output current	4 mA to 20 mA	RL = 0 to 400 Ω
Power supply	0 V to +10 V	Output impedance 51 Ω 10mA MAX
Output accuracy	Less than 0.1%	
Response speed	Equivalent to scanning synchronizing of camera	Analogue output is renewed every scanning frequency
Operational power supply	AC 100 V \pm 10 %, less than 20 VA	
Operating ambient temperature	0°C to +40°C	Free from due condensation
Dimensional outline	110 (W) \times 250 (H) \times 185 (D) mm	
Weight	Approx. 2.8 kg	
Connecting method	Input / output ... Terminal block Camera ... D sub connector	
Meter accuracy	\pm 2.5 %	