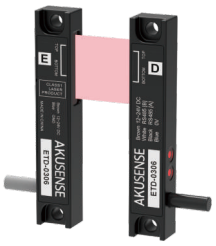
ETD Series



Basic features	Working principle	Photoelectric sensor
	Housing	Flat block
	Optical working principle	Thru-beam
	Measuring range	Edge detection mode ±3.25mm, Diameter detection mode 6mm
	Sensor head mounting distance	0~200mm
	Light source	Red laser
	Spot size	–
	Indicator	Transmitter (laser emission indicator green); Receiver (optical axis adjustment indicator green, judgment output indicator red)
Electrical data	Linearity	± 0.12% F.S. (when setting distance 20mm); ±0.4% F.S. (when setting distance 100mm)
	Repeatability	1μm(when setting distance 20mm);3μm(when setting distance 100mm);5μm(when setting distance 200mm)
	Sampling period	–
	Operating voltage	12~24VDC ± 10%
	Operating current	Emitter:≤10mA，Receiver:≤70mA
	Communication mode	485 communication hexadecimal
	Temperature drift characteristics	–
	Circuit protection	Reverse connection protection
Environmental conditions	Operating temperature	–10~45℃(no freezing,no condensation)
	Storage humidity	–20~+60℃
	Operating humidity	35~85%RH(no condensation)
	Storage humidity	35~85%RH(no condensation)
	Ambient Illumination	Incandescent Lamp ≤ 3000 Lux; Sunlight ≤ 10000 Lux
	Vibration resistance	10 to 55 Hz, 1.5 mm double amplitude, 2 hours for each X, Y, and Z directions
	Enclosure rating	IP67
Mechanical data	Connection type	2x M8/4-pin connector with 0.3m cable
	Dimensions	2x8.2x60x10.5mm
	Material	Aluminum
	Weight	–
	Accessories	Brackets and screws
	Model	**ETD-0306**

Through-beam edge sensor

ETD Series

CE

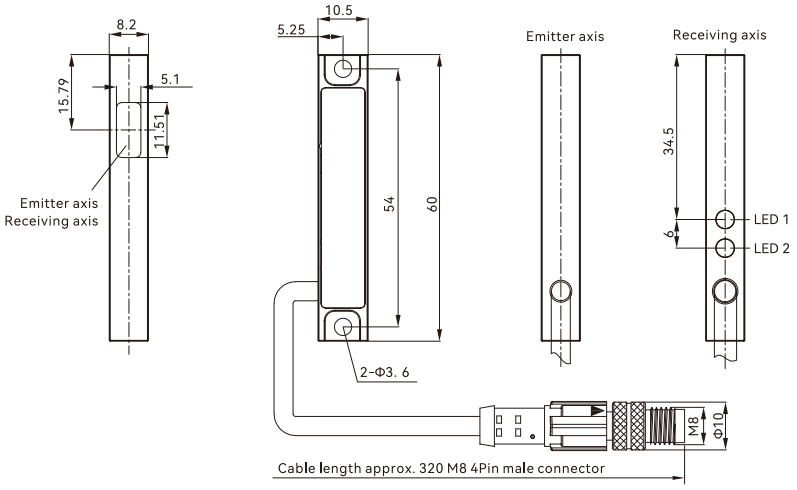
RoHS Compliant

Basic features	Working principle	Photoelectric sensor
	Housing	Flat block
	Optical working principle	Thru-beam
	Measuring range	Edge detection mode ±6mm, Diameter detection mode 12mm
	Sensor head mounting distance	0~500mm
	Light source	Red laser,650nm
	Spot size	13x3.5mm
	Indicator	Transmitter (laser emission indicator green); Receiver (optical axis adjustment indicator green, judgment output indicator red)
Electrical data	Linearity	± 0.12% F.S. (when setting distance 20mm); ±0.4% F.S. (when setting distance 100mm)
	Repeatability	1μm(when setting distance 20mm);3μm(when setting distance 100mm);5μm(when setting distance 200mm)
	Sampling period	1ms
	Operating voltage	12~24VDC ± 10%
	Operating current	Emitter:≤10mA，Receiver:≤70mA
	Communication mode	485 communication hexadecimal
	Temperature drift characteristics	± 0.03%/℃
	Circuit protection	Reverse connection protection
Environmental conditions	Operating temperature	-10~50℃
	Storage humidity	-20~60℃
	Operating humidity	35~85%RH(no condensation)
	Storage humidity	35~85%RH(no condensation)
	Ambient Illumination	Incandescent Lamp ≤ 3000 Lux; Sunlight ≤ 10000 Lux
	Vibration resistance	10 to 55 Hz, 1.5 mm double amplitude, 2 hours for each X, Y, and Z directions
	Enclosure rating	IP50
Mechanical data	Connection type	2x M8/4-pin connector with 0.3m cable
	Dimension	2x8.2x60x30mm
	Material	Aluminum
	Weight	0.01kg
	Accessories	Brackets and screws
	Model	**ETD-0612**

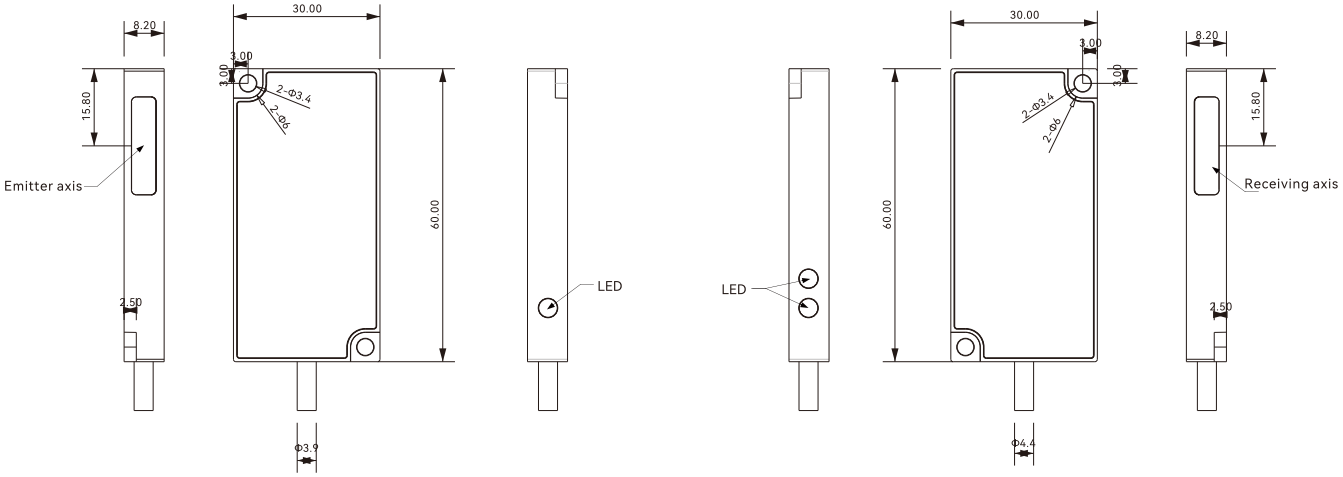
Unit:mm

Dimensions

ETD-0306

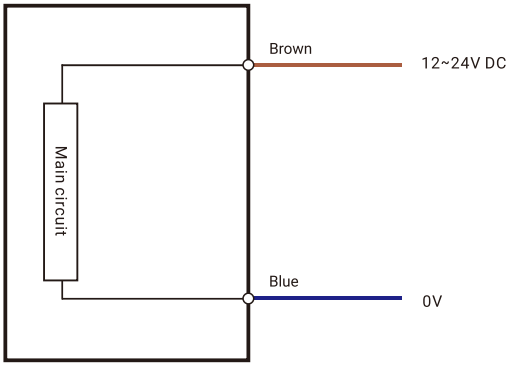


ETD-0612

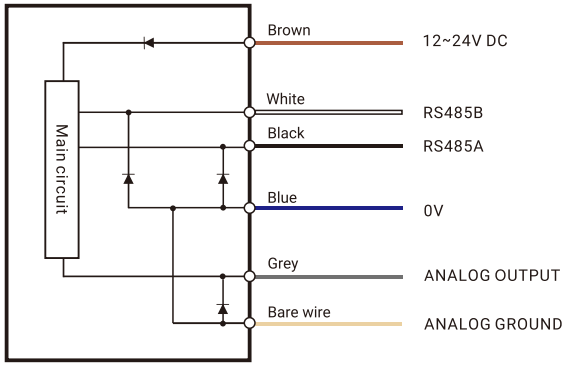


Circuit Diagram

Emitter



Receiver



Controller

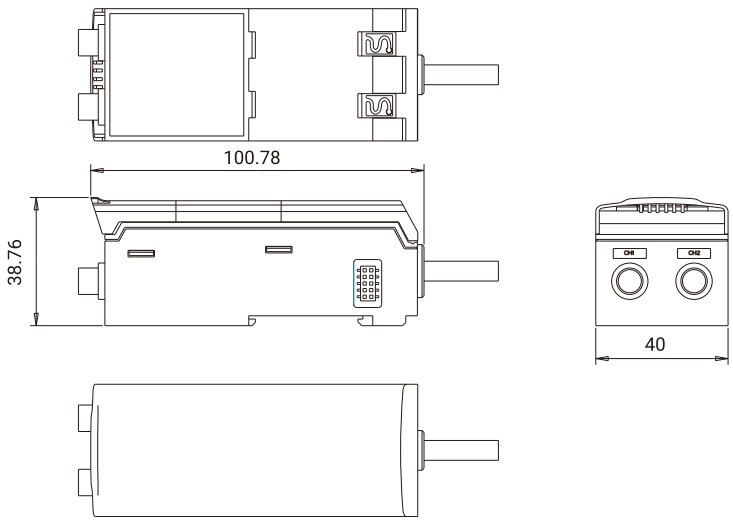
CR-M02

NEW!

	Installation method	DIN rail installation
	Operating voltage	+24VDC±10%
	Current consumption of a single controller	Under 100mA(When connecting the sensor)
	Number of connected sensors	Two pairs of sensors
	The communication with sensors	RS485
	Number of controllers connected in parallel	Up to 16 controllers can be connected
	Display	240*240TFT display
	Indicator light	Output 1~3 and function indicator light red
	Analog output	Analog output current 4~20mA, voltage 0~5V can be switched
	Switching output	3-channel output, NO, NC, PO, PC can be switched
	External input	3-channel input, NPN and PNP input optional
	Display resolution	1μm
	Display range	–99.999mm~99.999mm
	Protective structure	IP40
	Operating temperature	-10℃~+50℃
	Working humidity	35%RH~85%RH
	Insulation resistance	The resistance of all connecting terminals and shells is above 20MΩ
	Dielectric strength	All connection terminals and housing withstand voltage AC 1000V
	Vibration resistance	Frequency 10~55HZ, 1.5m double amplitude, two hours each in X, Y and Y directions
	Shock proof	98m/s² (about 10G) 5 times each in X, Y, and Z directions
	Model	**CR-M02**

Dimensions

Unit:mm



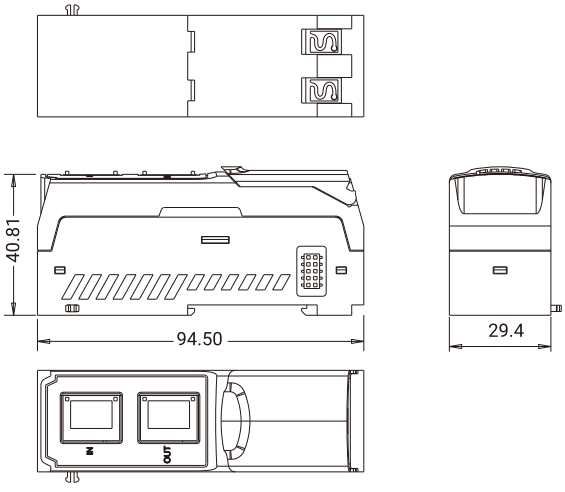
CTM01-EC

NEW!

	Installation method	DIN rail installation
	Operating voltage	24V DC(10~30V DC)
	Indicator light	PWR: Power indicator/green RUN: running indicator light/green ERR: Error indicator/red Sensor communication indicator light: red light (RTU communication abnormality) Ethernet port：(green) D-BUS: RTU Communication normal/green light Ethernet port(green): RTU communication abnormality/traffic light alternation of some slave stations No RTU communication activity/off The Ethernet port has established a valid network connection/on. The Ethernet port is in network activity/blinks. The Ethernet port does not establish a network connection or the port is abnormal/off.
	100M Ethernet port	10/100Base-T (X) RJ45, automatic flow control, full and half-duplex mode, MDI/MDI-X automatic detection
	Burning port	The software programming port uses 8-bit terminal blocks with a pitch of 2.0mm, occupying 2-5 positions from the left
	Console port	The CLI command management port uses 8-position terminal blocks with a spacing of 2.0mm, occupying 6-8 positions from the left
	RS-485 serial port	Supports 2 RS-485 serial ports, one of which is reserved, using 10-bit terminal blocks with a spacing of 2.0mm, and the serial port occupies 4 bits
	Reset button	Reset button
	Access terminal,noload power consumption at normal temperature	10-position terminal block with a pitch of 2.0mm, 2 positions for power supply，0.7w@10VDC 0.7w@20VDC 0.7w@30VDC
	Full-load power consumption at normal temperature	0.7w@10VDC 0.7w@20VDC 0.7w@30VDC
	High temperature full load power consumption	0.8w@10VDC 0.8w@20VDC 0.8w@30VDC
	Operating temperature	-40℃~75℃
	Storage temperature	-40℃~85℃
	Working humidity	5%~95%（No condensation）
	Model	CTM01-EC

Dimensions

Unit:mm

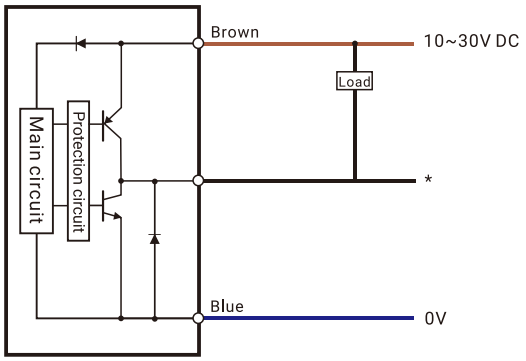


Controller/Communicator

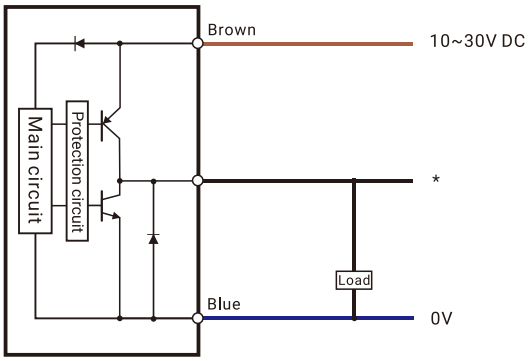
Circuit Diagram

Input Circuit Diagram

NPN Output



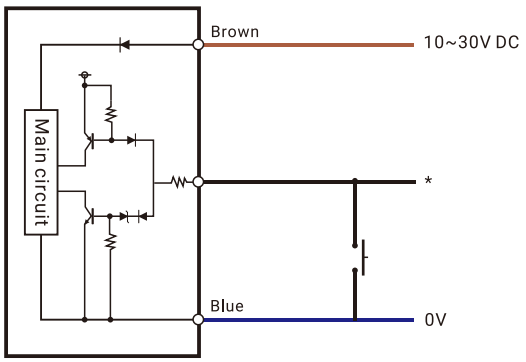
PNP Output



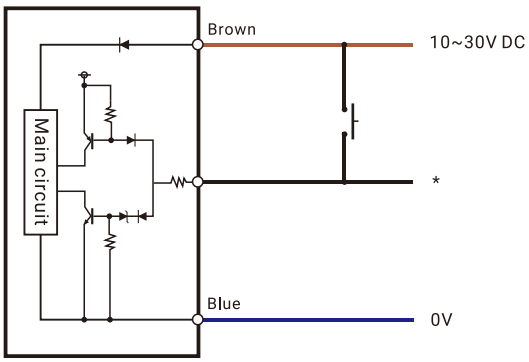
* Black (HIGH detection output) / White (LOW detection output) / Grey (GO detection output) / Green (Verification input)

Output Circuit Diagram

NPN Output



PNP Output



* Pink (External Input 1) / Yellow (External Input 2) / Pink Purple (External Input 3) / Purple (External Input 4)