

Photoelectric distance sensor **PDT** series



Features

- ◆ Exquisite exterior design, strong lightweight aluminum housing
- ◆ Convenient operation panel with dual digital display
- ◆ Wide range, high precision measurement, multiple modes to choose from
- ◆ Optical axis alignment indication, easy installation alignment
- ◆ Compatible with one tow two, multi-controller cascading, EtherCAT networking

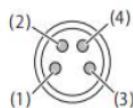
Part number

Controller	PDT-CT01
Detection head	PDT-010M8
Connect cables	CB-M2.6-YM8

Technical specifications

Measuring range	10mm	Number of connected units	1/2 pairs
Installation interval	0...300mm	Static current	<120mA(Rated voltage)
Linearity	$\pm 0.4\%F.S.(\pm 40\mu m)$ at a distance of 100mm	Dynamic current	<150mA(Rated voltage)
Repeatability	$\pm 10\mu m$ (Setting distance:100 mm)	Minimum (load) operating current	<0.5mA
Minimum detection object	$\Phi 1mm$ (Setting distance:300mm)	Voltage drop	<2.5V@Ie=200mA
Light source	Red semiconductor laser Class 1	Operating temperature	-10 ... +45°C(No freezing)
Sampling period	500us	Ambient humidity	35 ...85% RH(No condensation)
Ptical axis calibration light	Green LED(Including one Emitter and one receiver)	Anti-ambient light	Incandescent light: < 3,000lux
Alarm light	Red LED(Receiver)	Circuit protection	Overload indication,short circuit protection, zener protection
Power consumption	$\leq 720mW@24VDC$ (Including Emitter and receiver)	Ptical axis alignment indication	Yes
External input	CH1	Installation type	DIN Rail mounting setup
Switching output	CH1 output,PNP/NPN optional	Protection degree	IP50
Analog output	CH1/CH2 output, analog voltage(0-10V output resistance 100 Ω)	Materials	Detection head:metal;Controller:plastic
Display resolution	1 μm	Cable	PVC
Communication function	Controller and detection head:RS485 bus		

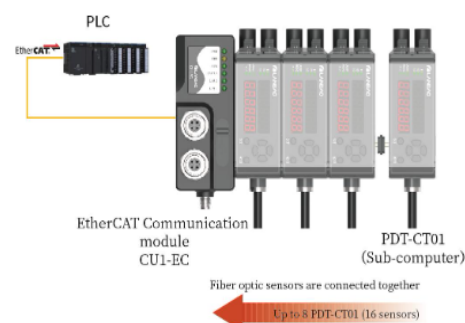
Wiring diagram



Pin number	Emitter	Receiver
1	DC5V $\pm 5\%$	DC5V $\pm 5\%$
3	GND	GND
2	RS-485A	RS-485A
4	RS-485B	RS-485B

BN:12-24V
 BU:GND
 OG:Input
 WH:Analog 1+
 shied:Analog 1-
 RD:HI output
 PL:GO output
 YL:LO output
 PK:Analog 2+
 shied:Analog 2-

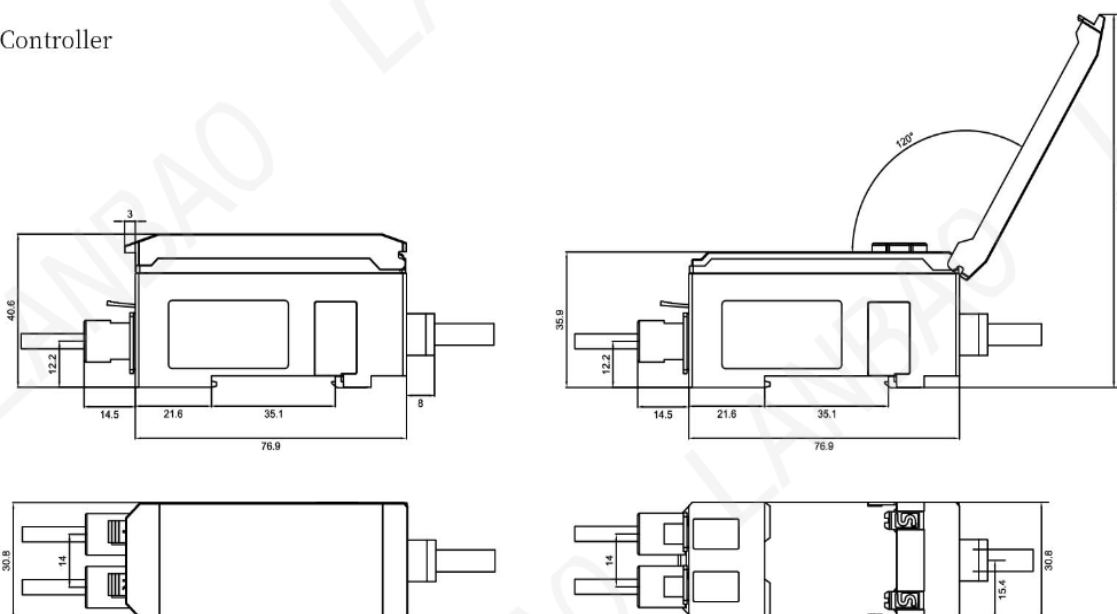
Controller



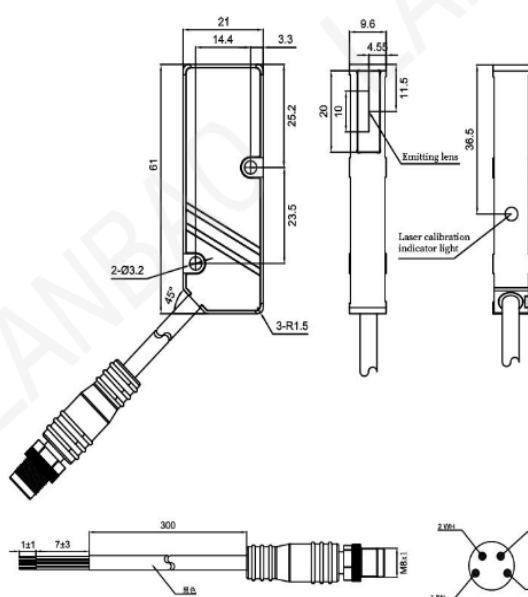
EtherCAT Network diagram

Dimensions

Controller



Emitter



Receiver

