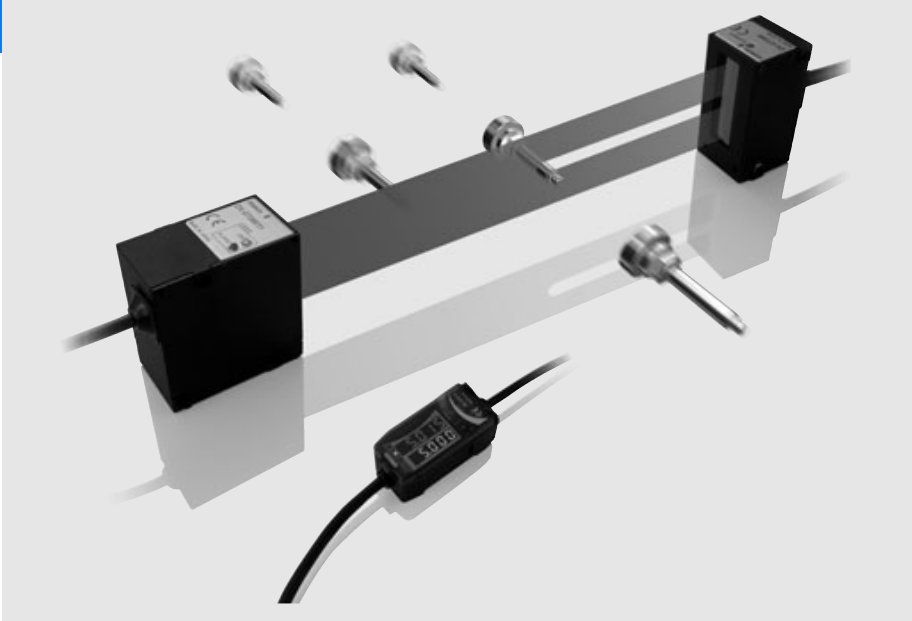


Smart Laser Micrometer
ZX-GT

- High accuracy: 5-10 µm
- All surfaces
- Long sensing distance: < 500 mm
- Line width up to 28 mm
- Calculation unit for multiple heads
- Fast sampling time: 0.5 ms
- PC software for setup



ZX-GT

Ordering Information

Sensors

Appearance	Optical system	Measuring width	Sensing distance	Resolution	Output type	Model	
Separate type 	Through-beam	28 mm	0 to 500 mm	10 μm	NPN	ZX-GT28S11	
					PNP	ZX-GT28S41	
Integrated type 			40 mm		NPN	ZX-GT2840S11	
					PNP	ZX-GT2840S41	

Controller

Appearance	Power supply	Output type	Model
	DC	NPN	ZX-GTC11
		PNP	ZX-GTC41

Accessories (Order Separately)

Set of Interface Unit and Setup software PCs

Output type	Model
NPN	ZX-GIF11A
PNP	ZX-GIF41A

Interface Unit(RS-232C/Binary output)

Appearance	Power supply	Output type	Model
	DC	NPN	ZX-GIF11
		PNP	ZX-GIF41

Setup software PCs

Name	Model
Smart Monitor GT	ZX-GSW11

Calculating Units

Appearance	Model
	ZX-CAL2

Receiver-Controller Extension Cable

Cable length	Model		Quantity
	Standard cable	Flexible cable	
1 m	ZX-XGC1A	ZX-XGC1R	1 m
2 m	ZX-XGC2A	ZX-XGC2R	
5 m	ZX-XGC5A	ZX-XGC5R	
8 m	ZX-XGC8A	ZX-XGC8R	
20 m	ZX-XGC20A	ZX-XGC20R	

Up to two extension cables can be connected. However, be sure to limit the total extension cable length between the receiver and the Controller to 30 meters (including the receiver cable).

Specifications

Sensor

Item	ZX-GT28S11	ZX-GT2840S11	ZX-GT28S41	ZX-GT2840S41
Output type	NPN		PNP	
Appearance	Separate type	Integrated type	Separate type	Integrated type
Light source	Visible semiconductor laser diode (wavelength 650 nm, CLASS 1 of EN60825-1/IEC60825-1, CLASS of FDA(21CFR 1040.10 and 1040.11)			
Measuring width	28 mm			
Sensing distance	0 to 500 mm	40 mm	0 to 500 mm	40 mm
Minimum sensing object	0.5mm dia. ^(*1)	0.2 mm dia.	0.5 mm dia. ^(*1)	0.2 mm dia.
Linearity	±0.1%F.S. ^(*2)			
Resolution	10 μm (number of process values to average: 16) ^(*3)			
Temperature characteristic	±0.01%F.S/C ^(*4)			
Indicators (emitter)	Laser ON indicator (green), laser alarm indicator (red)			
Indicator (receiver)	Optical axis setting indicator (green)			
Laser OFF input/sync input	ON: Short-circuited with 0 V or 1.5 V max. OFF: Open (leakage current: 0.1 mA max.)		ON: Short-circuited with power supply voltage or power supply voltage -1.5 V max. OFF: Open (leakage current: 0.1 mA max.)	
Laser deterioration alarm output	NPN open-collector output 30 VDC 20 mA max. Residual voltage 1.2 V max.		PNP open-collector output 30 VDC 20 mA max. Residual voltage 2 V max.	
Power consumption (emitter)	30 mA max.			
Power supply voltage (emitter)	24 VDC +10%, -15% ripple (p-p) 10% max.			
Dielectric strength	1,000 VAC, 50/60 Hz for 1 min			
Insulation resistance	20 MΩ (at 500 VDC megger)			
Operating ambient illumination (emitter)	3,000 lx (incandescent light)			
Operating ambient illumination (receiver)	1,000 lx (incandescent light) ^(*5)			
Ambient temperature	Operating: 0 to +40°C Storage: -15 to +50°C(with no icing or condensation)			
Ambient humidity	Operating and storage: 35 to 85% (with no condensation)			
Vibration resistance (durability)	10 to 150 Hz Single-amplitude: 0.75 mm for 80 min each in X, Y and Z directions			
Degree of protection	IEC60529 IP40			
Cable length	2 m			
Material	Case: aluminum die-cast, Lens: glass			
Weight (packed state)	Approx. 550 g	Approx. 570 g	Approx. 550 g	Approx. 570 g
Accessories	Laser warning labels, Instruction Sheet			

F.S.: 28 mm measuring range of receiver

*1: Distance between emitter and receiver: 500 mm, measurement object at 250 mm from receiver. Glass ends of chamfer 0.1 mm or more can be detected in glass edge measurement mode. (at binary level 70%)

*2: Linearity is given to be a typical error with respect to an ideal straight line when the distance between the emitter and receiver is 100 mm and light is blocked at a distance of 50 mm from the receiver. (On the ZX-GT2840□□, the measurement object is measured at a distance of 20 mm from the receiver.)

*3: The amount of fluctuation ($\pm 3\sigma$) in the analog output when the distance between the emitter and receiver is 100 mm and a ZX-GTC□□ is connected

*4: Change in the light cutoff value on one side when the distance between the emitter and receiver is 100 mm and the light is half-cutoff at a distance of 50 mm from the receiver (On the ZX-GT2840□□, the measurement object is measured at a distance of 20 mm from the receiver.)

*5: Standard mode (NORM) used