

Linear Measurement Type

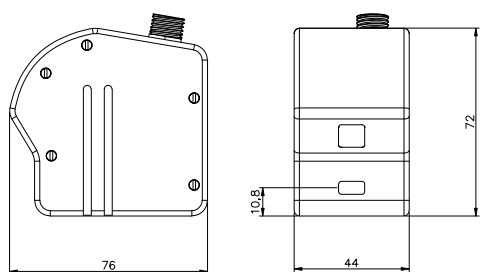
ESX series



Appearance

Reference distance	35mm	125mm	170mm	340mm
Sensing range	MR(Range)	10mm	50mm	100mm
	SMR(Gauge)	25mm	75mm	70mm
	Xsmr(Near)	8mm	30mm	48mm
	xemr(Far)	11mm	41mm	82mm
Operating voltage	9~30V			
Power consumption	6W (without built-in heater)			
Communication	Ethernet/1000Mbps			
Synchronous input	RS422, 3 channel			
Output	RS422, 1 channel			
Laser source	658nm or 405nm or 450nm or 808nm			
Laser class	class 2M (IEC)			
Linearity	Z axis	± 0.05% F.S. (standard mode); ± 0.1% F.S. (DS mode)		
	X axis	± 0.2% F.S.		
Resolution	Z axis	0.01% F.S. (standard mode), 0.02% F.S. (DS mode)		
	X axis	648 or 1296 points (programmable value)		
Standard sampling rate (full working range)	484 profiles / sec (standard mode); 938 profiles / sec (DS mode)			
Maximum sampling rate (ROI mode)	5096 profiles / sec; 6800 profiles / sec (DS mode)			
Temperature drift	0.02% F.S/°C			
Enclosure rating	IP67			
Ambient luminance	Incandescent or fluorescent; Max. 5000 lux			
Ambient temperature	-20°C~+40°C			
Relative humidity	5~95%			
Shock resistance	30g/6ms			
Vibration resistance	20g/10~1000Hz 6 hours in XYZ direction			
Material	Aluminum/Glass			
Storage temperature	-20°C~+70°C			
Weight	550g		600g	
Model No.	ESX-G10	ESX-G50	ESX-G100	ESX-G250

Dimensions



Unit: mm

connector #1



connector #2



Circuit diagram

connector #1

#	Assignment, 100baseTX	Assignment, 1000baseT
1		D4+
2		D3-
3		D3+
4	RX+	D2-
5	RX+	D2+
6	TX+	D1-
7	TX+	D1+
8		D4-

connector #2

#	Assignment	Note
1	OUT1-	RS422
2	IN3-	RS422
3	IN3+	RS422
4	IN2-	RS422
5	IN2+	RS422
6	NEXT_LAS_OFF	Laser OFF
7	IN2+	RS422
8	IN2-	RS422
9	OUT1+	RS422
10	V+	+9~30V, 650mA max
11	GND	Grounding
12	0V	0V power supply(<-)