



SRI7140

All-in-one 3D Laser Profiler

Specifications

Model	SRI7140		
Reference distance (CD)	140mm		
Measurement range	Z-axis height (FS)	+34mm, -54mm (FS=88mm)	
	X-axis width	Near side	70mm
		Reference Distance	86mm
Remote side ^①	110mm		
Light source	Light source wavelength	405nm	
	Laser class	2M	
	Laser output power	10mW	
Repeatability	Z-axis (height) ^②	0.5μm	
	X-axis (width) ^③	7.5μm	
Linearity	Z-axis (height)	±0.02% F.S.	
Profile data interval	X-axis (width)	30μm	
X-axis profile points	3200		
Scanning speed	750~10000Hz		
Temperature characteristics	0.01% F.S./°C		
Data interface	1 Ethernet interface 100Base-TX/1000Base-T		
Input	Differential encoder (Trigger) ^④ , start signal ^⑤		
Input voltage	DC 24V (45W)		
Working temperature	0 ~ 50°C		
Storage temperature	-20 ~ 70°C		
Working humidity	35% ~ 85% No condensation		
ESD protection	Contact discharge 4kV, air discharge 8kV, comply with IEC 61000-4-2		
EFT protection	Power port 2kV/5 or 100kHz, signal port 1kV/5 or 100kHz, comply with IEC61000-4-4		
Shock resistance	Each axis 50Gs/3ms, comply with IEC 68-2-27 Ea		
Vibration resistance	10Gs (10-500Hz), comply with IEC 68-2-6 Fc		
Protection level	IP67, comply with IEC 60529		
Data cable (network cable) model	L type: SCB-HNET-HR2Z-3m/6m/10m I type: SCB-HNET-HB2Z-3m/6m/10m		
Data cable (I/O cable) model	L type: SCB-HIO-HR2Z-3m/6m/10m I type: SCB-HIO-HB2Z-3m/6m/10m		
Dimension (mm)	155.5 x 54 x 94.5mm		
Weight	Approximately 1kg		

Notes:

- ① The value achieved by increasing the profile data interval.
- ② The value was obtained through 4096 average static tests.
- ③ The value under the nominal profile data interval.
- ④ Only supports 5V differential signals, other level signals require external current-limiting resistors; Encoder input and pulse triggered input port multiplexing.
- ⑤ Only signals with an input voltage of 24V are supportmultiplexing.

Structural Dimensions

