



SRI7120R

All-in-one 3D Laser Profiler

Specifications

Model	SRI7120R		
Reference distance (CD)	120mm		
Measurement range	Z-axis height (FS)		
	+12.5mm, -14.5mm (FS=27mm)		
	X-axis width	Near side	41mm
		Reference Distance	46mm
Remote side ^①		53mm	
Light source	Light source wavelength		
	650nm		
	Laser class		
2M			
Laser output power		10mW	
Repeatability	Z-axis (height) ^②		
	0.6um		
X-axis (width) ^{②③}		4um	
Linearity	Z-axis (height)		
±0.02% F.S.			
Profile data interval	X-axis (width)		
16um			
X-axis profile points		3200	
Scanning speed		1400~10000Hz	
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)		136 x 54 x 118mm	
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

