



## SRI7050

All-in-one 3D Laser Profiler

### Specifications

Model		SRI7050	
Reference distance (CD)		50mm	
Measurement range	Z-axis height (FS)		+7.5mm, -8.5mm (FS=16mm)
	X-axis width	Near side	26mm
		Reference Distance	28mm
		Remote side <sup>①</sup>	30mm
Light source	Light source wavelength		405nm
	Laser class		2M
	Laser output power		10mW
Repeatability	Z-axis (height) <sup>②</sup>		0.2μm
	X-axis (width) <sup>②③</sup>		2.5μm
Linearity	Z-axis (height)		±0.02% F.S.
Profile data interval	X-axis (width)		10μm
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) <sup>④</sup> , start signal <sup>⑤</sup>	
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)		165.5 x 54 x 94.5mm	
Weight		Approximately 1.1kg	

**Notes:**

- ① The value under the nominal 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

