



## SRI8020

All-in-one 3D Laser Profiler

### Specifications

Model		SRI8020	
Reference distance (CD)		23mm	
Measurement range	Z-axis height (FS)	+2.3mm, -2.9mm (FS=5.2mm)	
	X-axis width	Near side	13mm
		Reference Distance	14.5mm
		Remote side <sup>①</sup>	16mm
Light source	Light source wavelength	405nm	
	Laser class	2M	
	Laser output power	10mW	
Repeatability	Z-axis (height) <sup>②</sup>	0.1μm	
	X-axis (width) <sup>②③</sup>	1.5μm	
Linearity	Z-axis (height)	±0.02% F.S.	
Profile data interval	X-axis (width)	5μm	
X-axis profile points		3200	
Scanning speed		3200~67000Hz	
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 (36W)	
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)		135.5 x 58 x 98mm	
Weight		Approximately 0.97kg	

**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

