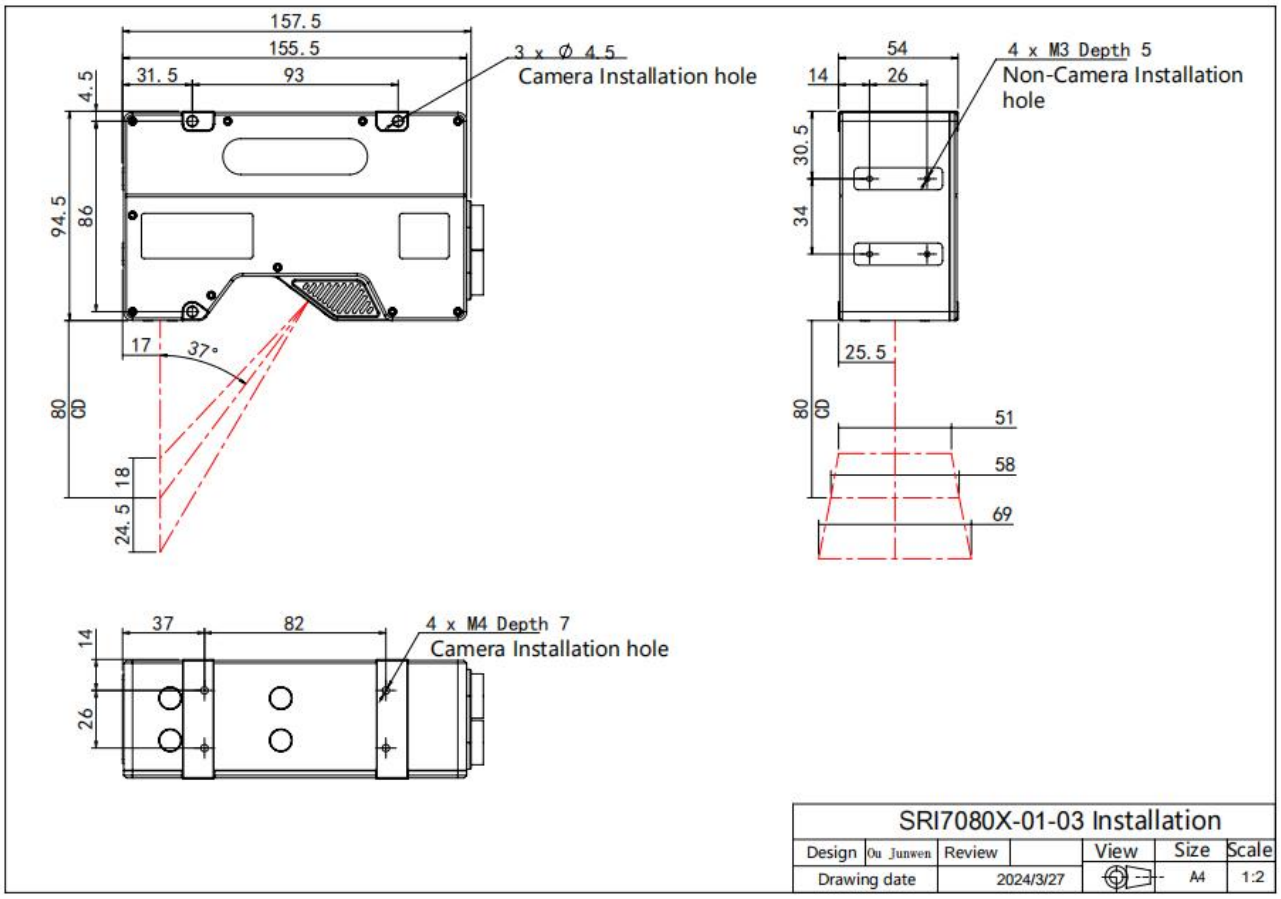
SRI7080

All-in-one 3D Laser Profiler

Specifications

Model			SRI7080
Reference distance (CD)			80mm
Measurement range	Z-axis height (FS)		+18mm, -24.5mm (FS=42.5mm)
	X-axis width	Near side	51mm
		Reference Distance	58mm
		Remote side①	69mm
Light source	Light source wavelength		405nm
	Laser class		2M
	Laser output power		10mW
Repeatability	Z-axis (height)②		0.4μm
	X-axis (width)②③		5μm
Linearity	Z-axis (height)		±0.02% F.S.
Profile data interval	X-axis (width)		20μm
X-axis profile points			3200
Scanning speed			750~10000Hz
Temperature characteristics			0.01% F.S./℃
Data interface			1 Ethernet interface 100Base-TX/1000Base-T
Input			Differential encoder (Trigger)④, start signal⑤
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 1.15kg

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 supportemultiplexing.

Structural Dimensions