

Main Unit Spec

Signal processing unit		PV-01	
Optical sensor		S-100Z	S-150Z/200
Measurement method		Diffraction laser light Doppler method	
Laser source		Visible-light semiconductor laser (650 nm) class 2	
Measurement distance		40 mm (from the sensor end face)	200 mm (from the sensor end face)
Measurement depth		±5 mm (from the measurement distance)	±7.5 mm (from the measurement distance)
Laser spot size		2.4×0.1 mm (at the measurement distance)	3.0×0.5 mm (at the measurement distance)
Speed measurement range		-200 to 10000 mm/s	-300 to 15000 mm/s
F/V output	Output voltage	RANGE1: -200 to 10000 mm/s: -0.1 to 5.0 V RANGE2: -200 to 5000 mm/s: -0.2 to 5.0 V RANGE3: -200 to 1000 mm/s: -1.0 to 5.0 V RANGE4: -200 to 500 mm/s: -2.0 to 5.0 V RANGE5: -200 to 250 mm/s: -4.0 to 5.0 V Measurement range can be set as needed.	RANGE1: -300 to 15000 mm/s: -0.1 to 5.0 V RANGE2: -300 to 7500 mm/s: -0.2 to 5.0 V RANGE3: -300 to 1500 mm/s: -1.0 to 5.0 V RANGE4: -300 to 750 mm/s: -2.0 to 5.0 V RANGE5: -300 to 375 mm/s: -4.0 to 5.0 V Measurement range can be set as needed.
	Sampling period	1 ms	
	Accuracy (at 0 to 45°C)	≤±1%	
	Output impedance	50 Ω	
Pulse output	Output signal	A/B phase output	
	Output level	5 V TTL	
	Length measurement resolution	Default S-100Z: 2.5 μm Setting range 1.0 to 100 μm (can be set as needed)	Default S-150Z/200: 3.75 μm Setting range 1.0 to 100 μm (can be set as needed)
	Measurement accuracy (at 24°C)	≤±0.1% (-100 mm/s to +100 mm/s: ±0.1 mm)	≤±0.15% (-150 mm/s to +150 mm/s: ±0.1 mm)
	Measurement accuracy (at 0 to 45°C)	≤±0.2% (-100 mm/s to +100 mm/s: ±0.2 mm)	≤±0.2% (-150 mm/s to +150 mm/s: ±0.2 mm)
I/O (D-sub)	Trigger input	5 to 24 V 15 mA max. Pulse width 100 μs	
	Trigger output	Open collector output	
	Pulse output	Differential signal output Open collector output	
	Error output	Open collector output	
Measurement repeatability		0.02% (under Canon's measurement conditions)	
Diffuse reflectance of measured object		≥20%	
Operating temperature		0 to 45°C	
Storage temperature		-30 to 60°C	
Humidity		≤80% RH	
Supply voltage		90 to 240 VAC (50 Hz to 60 Hz)	
Weight	Optical sensor	0.3 kg	1.4 kg
	Signal processing unit	3.3 kg	

