



PJ-56

Expansion Unit

*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

Specifications

Model		PJ-56
No. of beam axes		4
Beam axis spacing		40 mm 1.575" max.*1
Maximum optical axis number		28 optical axes (PJ-50A x 1 + PJ-55A + PJ-56) *2
Detection area		—
Detecting distance		5 m 16.40'
Detectable object		Opaque materials (50 mm dia. min.) *3
Light source		Infrared LED
Indicator lamp		Output (PJ-50AR)/Power (PJ-50AT) : Red LED, Stable operation (PJ-50AR) : Green LED
Response time		15 ms or less
Output	Control output	NPN open collector 100 mA max. (40 V max.), Residual voltage : 1 V max.
Control output	Operation mode	LIGHT-ON/DARK-ON (switch-selectable)
Noise resistance (power supply line)		350 V, pulse width : 1 μs (by way of a noise simulator)
Protection circuit		Reversed polarity, overcurrent protection, surge absorber
Rating	Power voltage	12 to 24 VDC ±10 %, Ripple (P-P) 10 % or less
	Current consumption	50 mA (PJ-56T: 10 mA, PJ-56R: 40 mA) (total of T, R)*4
Environmental resistance	Enclosure rating	IP64
	Ambient light	Incandescent lamp: 3,500 lux max., Sunlight: 12,000 lux max.
	Ambient temperature	-20 to +50 °C -4 to 122 °F (No freezing)
	Relative humidity	35 to 85 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm 0.06", 2 hours in each of the X, Y, and Z directions
	Shock resistance	100 m/s², 3 times in each of the X, Y, and Z directions
Material		Housing : Glass-fi bre reinforced plastic, Lens cover : PFA
Weight		PJ-56T: Approx. 120 g, PJ-56R: Approx. 125 g

*1 The optical axis pitch of the hinged section may be 40 mm 1.575" or more depending on the mounting method.

*2 Up to two PJ-56 units can be used with each set of expandable area sensors.

*3 When the optical axis pitch of the hinged section is 40 mm .

*4 This is the value with a power supply voltage of 24 V. (80 mA for the PJ-50A, 20 mA for the PJ-55A, and 45 mA for the PJ-56 with a power supply voltage of 12 V.)

* Download CAD file or product manual for larger image/text and more detail.

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Mark Number of optical axes	D	E	F	G
4	169.5	117	195	167.5
6	249.5	197	275	247.5
8	330	277.5	355.5	328
10	410	357.5	435.5	408
12	490	437.5	515.5	488
14	570.5	518	596	568.5
16	650.5	598	676	648.5
18	731	678.5	756.5	729
20	811	758.5	836.5	809
22	891.5	839	917	889.5
24	971.5	919	997	969.5

Technical drawing of a mechanical part showing three views: front, top, and side.

- Front View:** Shows a rectangular base with two vertical slots. Each slot contains a hole. Dimensions include overall width 25, slot width 6.4, and various heights (64.5, 42.5, 31, 15, 5). Labels indicate "2 x ø4.6" for the holes and "2 x Slot E" for the slots.
- Top View:** Shows the plan of the part. Dimensions include overall length 25.6, slot width 6.4, and distance from edge to slot center 1.5. A label "Slot E" points to one of the slots.
- Side View:** Shows the profile of the part. Dimensions include total height 72, base thickness 1.6, and other vertical dimensions (64.8, 42.5, 31, 15, 10, 16.6, 43.8).

Unit: mm