



FS-V1

Fiber Amplifier, Cable Type, Main Unit, NPN



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

⚠

This model has been discontinued.

Compliance with the certification standard is ensured as of the time of shipment from our company.

Contact Us: 1-888-539-3623

Recommended Replaceable Products: [Digital Fiber Optic Sensors - FS-N series](#)

Specifications

Model		FS-V1
Type		Main unit
Output		NPN
Light source		Red LED
Response time		250 μs
Operation mode		LIGHT-ON/DARK-ON (switch-selectable)
Indicator lamp		Display indicator (Two): Red LED Received light display: LCD (Two color display: Red and green) Calibration indicator: Orange LED
Timer function		ON-delay: 40 ms/OFF-delay: 40 ms/Timer OFF (switch-selectable)
Control output		NPN open-collector 100 mA max. (24 VDC max.), Residual voltage: 1 V max. The FS-V1P is equipped with two outputs.
Protection circuit		Reversed polarity protection, over-current protection, surge absorber
Unit expansion		Up to 16 expansion units can be connected (a total of 17 units). ^{*1}
Mutual interference suppression		4
Rating	Power voltage	12 to 24 VDC ±10 %, Ripple (P-P) 10 % or less ^{*2}
	Current consumption	50 mA or less
Environmental resistance	Ambient light	Incandescent lamp: 10,000 lux max., Sunlight: 20,000 lux max.
	Ambient temperature	-10 to +55 °C 14 to 131 °F (No freezing) ^{*3}
	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	500 m/s ² , 3 times in each of the X, Y, and Z directions
Case material		Polycarbonate
Weight		Approx. 80 g

^{*1} If more than one unit is used together, the ambient temperature varies with the conditions below. Mount the units on the DIN rail with mounting brackets and check that the output current is 20 mA or less.
3 to 10 Units: -10 to 50°C **14 to 122°F**, 11 to 16 Units: -10 to 45°C **14 to 113°F**

^{*2} Neither the FS-V12 nor the FS-V10 can be used as a standalone unit.

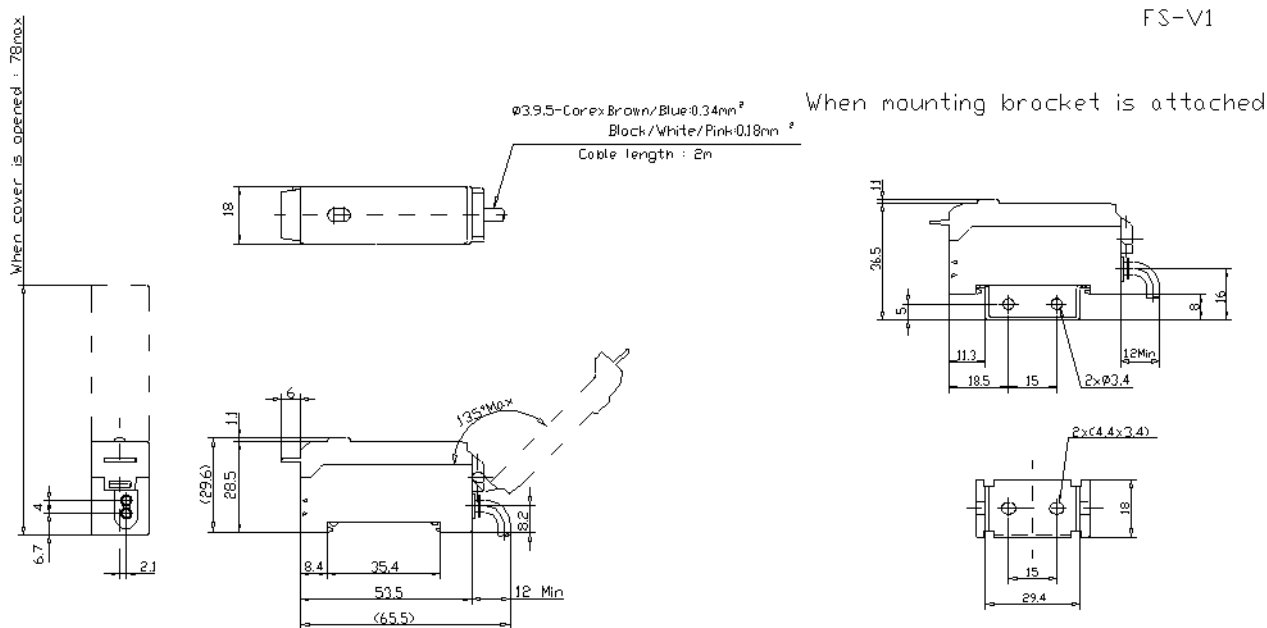
^{*3} When several units are connected, the ambient temperature requirement varies depending on the total number of units connected.
When 3 to 10 units: -10 to +50 °C **14 to 122 °F**
When 11 to 16 units: -10 to +45 °C **14 to 113 °F**

When connecting several units, be sure to mount the units to a metallic DIN rail. Make sure that the output current does not exceed 20 mA.

Dimensions

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

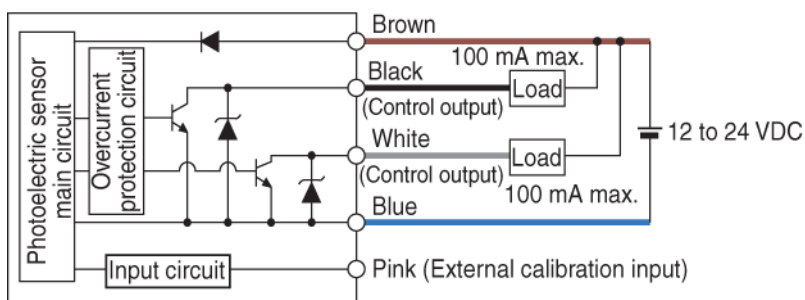
FS-V1



I/O Circuit Connection diagram

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

I/O Circuit



(External calibration input circuit)

