



LV-51M

Amplifier Unit, Main Unit, NPN

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*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.

Contact Us: 1-888-539-3623

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

Recommended Replaceable Products: Multi-Purpose Digital Laser Sensor - LV-N series

Specifications

Model		LV-51M
Туре		NPN output
Main unit/expansion unit		Main unit
Control output		NPN open-collector x 2 channels, 40 VDC max., 100 mA, max. residual voltage (1.0 V max.)
Response speed		FINE : 80 μs , TURBO : 500 μs , SUPER : 4 ms
Monitor output		1 to 4 V for 1 to 4 V voltage output and FINE display 0 - 3000, load resistance 20 $k\Omega$ min.
Number of interference preventive units		FINE: No device (0), TURBO: 2 units, SUPER: 4 units*1
Detection mode		Light intensity distinction / edge detection
Protection circuit		Reversed polarity protection, over-current protection, surge absorber
Unit expansion		Up to 7 additional expansion units can be installed (8 units including the main unit),
Rating	Power voltage	12 to 24 VDC, Ripple (P-P) 10 % or less
	Power consumption	1.5 W max. (125 mA max. for 12 V, 62.5 mA max. for 24 V)
Environmental resistance	Ambient temperature	-10 to +55 °C 14 to 131 °F (No freezing) *2
	Relative humidity	35 to 85 % RH (No condensation)
Material	Main unit	Polycarbonate
	Case	
Weight		Approx. 120 g

^{*}¹ To connect several units they must be mounted on a METAL DIN rail. Ensure that the output current is 20 mA max. With several units connected, the allowable ambient temperature range varies as follows:

When 2 to 5 expansion units are additionally installed : -10 to +50°C (14 to 122°F).

When 6 or 7 expansion units are additionally installed: -10 to +45°C (14 to 113°F).

When 2 to 5 units: -10 to +50 °C 14 to 122 °F

When 6 to 7 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.

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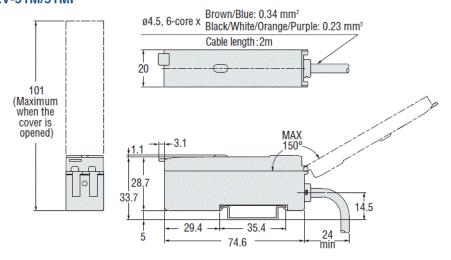
^{*2} When several units are connected, the ambient temperature requirement varies depending on the total number of units connected.



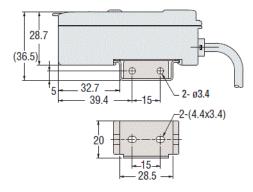
Dimensions

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

LV-51M/51MP



Mounting bracket attached (LV-51M/51MP accessory)

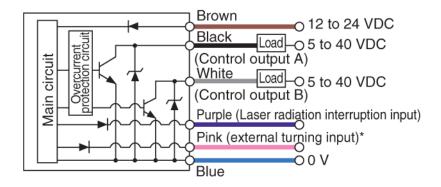




I/O Circuit Connection diagram

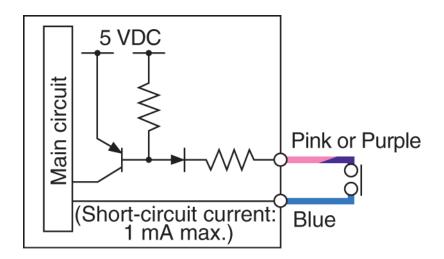
* Download CAD file or product manual for larger image/text and more detail.

NPN



^{*} Orange (monitor output) only for LV-51M

Laser radiation interruption (main unit only)
External calibration input
NPN





Analogue output circuit for monitoring (LV-51M/51MP only)

