



FS-N11N

Fibre Amplifier, Cable Type, Main Unit, NPN





Specifications

Model		FS-N11N
Туре		Standard 1 output Cable
Output		NPN
Main unit/Expansion unit		Main unit
Control output		1 NPN open collector 24 V; 1 output max: 100 mA or less; 2 output total: 100 mA or less (used stand-alone)/20 mA or less (multiple connections); residual voltage 1 V or less
Monitor output (1-5 V)		-
External input		
Light source		Red, 4-element LED
APC		ON/OFF switchable (Factory setting: OFF)
Response time		$50~\mu s$ (HIGH SPEED) /250 μs (FINE) /500 μs (TURBO) /1 ms (SUPER) /4 ms (ULTRA) /16 ms (MEGA)
Number of interference prevention units		0 for HIGH SPEED; 4 for FINE; 8 for TURBO/SUPER/ULTRA/MEGA (When set to double, the number of interference-prevention units will be doubled.)
Unit expansion		Up to 16 units can be connected total (two output type is treated as two units)
Rating	Power voltage	12 to 24 VDC ±10 %, Ripple (P-P) 10 % or less
	Current Consumption	Normal: 900 mW or less (36 mA max. at 24 V, 48 mA max. at 12 V)*1 Eco on mode: 800 mW or less (32 mA max. at 24 V, 39 mA max. at 12 V)*1 Eco Full mode: 470 mW or less (19 mA max. at 24 V, 23 mA max. at 12 V)
Environmental resistance	Ambient light	Incandescent lamp: 20,000 lux or less, Sunlight: 30,000 lux or less
	Ambient temperature	-20 to +55 °C (No freezing)*2
	Relative humidity	35 to 85 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm, 2 hours in each of the X, Y, and Z directions
	Shock resistance	500 m/s², 3 times in each of the X, Y, and Z directions
Case material		Both main unit and expansion unit housing material: Polycarbonate
Weight		Approx. 75 g

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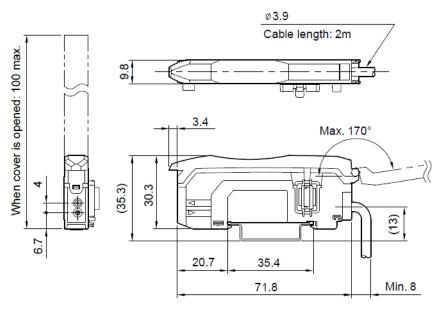
^{*1} Increases 100 mW (4.0 mA) for High Speed mode
*2 One or two more units connected: -20 to +55 °C; 3 to 10 more units connected: -20 to +50 °C; 11 to 16 more units connected: -20 to +45 °C. When using 2-outputs, one unit is counted as two units. All temperature regulations are for when the unit is mounted on a DIN rail and installed on metal



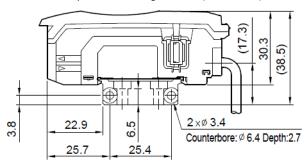
Dimensions

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

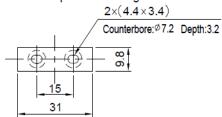
FS-N11N / N11P / N13N / N13P / N11MN



When amplifier mounting bracket (OP-73880) is used



Bottom surface of amplifier mounting bracket



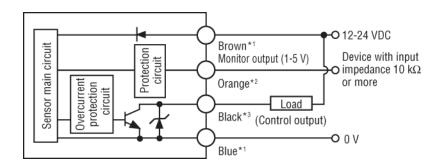
- * 1 FS-N11N(P)/N13N(P)/N11MN is not provided with an expansion connector.
- * 2 FS-N10 is not provided with cables.



I/O Circuit Connection diagram

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

Output Circuit Diagram



^{*1} FS-N11N/N11MN/N13N only

^{*2} FS-N11MN only

^{*3} The FS-N13N/N14N has a white cable as separate output 2.