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# AMP-FL8021-CLB-XX

# C/L-band Optical Fiber Amplifier Specifications



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### Preparations before use

This machine is warranted from any failure in normal operation as the machine is fully inspected mechanically and electrically before shipment from the factory. As soon as you receive the cargo, unpack and make certain that the machine is not damaged in transit.

### 1. Included Items

The standard included items are as follows. If any missing items are found upon inspection, contact us immediately.

Optical amplifier: 1 unitPower ON/OFF key: 2 pieces

• Power cord: 1 piece

• Spare fuse: 1 piece (stored in the fuse box of the AC inlet)

Specifications (by these presents): 1 copy (or CD)
 Operation Manual: 1 copy (or CD)
 Programming Manual: 1 copy (or CD)

• Final Test Inspection Record: 1 copy

We recommend that the carton box and the inner corrugated boards should be kept with care to avoid damage in case of reuse for transfer to another location.

### 2. Acceptance Inspection

### (1) Mechanical movement check

As to external appearance, movement of the switch, the pump on button, the adjust dial, and connectors, carry out inspection under the condition of being the power supply off to look for possible damage or trouble caused in transit.

### (2) Operation check

When no trouble is found upon mechanical movement check, carry out operation test to check functions, followed by the instructions of Operation Manual.

### (3) Upon finding damage or anomalies

If, during acceptance inspection, damage to the machine or anomalies in connection with the specifications is found, contact us immediately with details of the trouble.

# • Standard specifications

Product No.	AMP-FL8021-CLB			
Product No.	-22	-19	-16	-13
Signal Wavelength	1530 to 1560 nm, 1570 to 1610 nm			
Maximum Output Power *1	$\geq$ +22 dBm	$\geq$ +19 dBm	$\geq$ +16 dBm	$\geq$ +13 dBm
Gain *2	$\geq$ 35 dB	≥ 35 dB	$\geq$ 30 dB	≥ 25 dB
Noise Figure *2	≤7 dB			
Input / Output Isolation	≥ 40 dB			
Amplifier control	ACC / ALC			
Monitor items	Output power / Pumping LD current / Pumping LD temperature / Case temperature			
Safety function	Remote shutdown interlock			
	Interlock with input Alarm*4 / Interlock with Reflection from output port*4			
Remote control Interface	RS232C / IEEE488.1(GP-IB)			
Input / Output Fibers	Corning SMF28			
Optical Connectors	FC/PC standard			
Operation Temperature	0 to 40 °C			
Storage Temperature	-10 to 60 °C			
Size *3	88(H)×430(W) ×350(D) mm	88(	88(H)×260(W)×350(D) mm	
Power consumption	≤ 50W	≤ 30W		
Weight	≤7 kg			
Power Supply	AC 100-240V(50/60Hz)			
Laser Class (Maximum Output Power)	Class 3B Laser product (< 500mW)	Clas Laser p (< 20		Class 3R Laser product (< 50mW)

<sup>\*1:</sup> input power : > 0 dBm @1550/1580 nm \*2: input power : -30 dBm @1550/1580 nm

<sup>\*3:</sup> not including protrusions \*4: optional function

<sup>\*</sup> Including Input / Output isolator

## • Options

Option 012	FC/APC optical connector		
Option 013	SC/PC optical connector		
Option 014	SC/APC optical connector		
Option 091	Loss of input port interlock		
	(Input power monitor)		
Option 093	Reflection from output port interlock		
	(Reflected power monitor)		
Option 121	Rack mount kit *2 (CLB-13,16,19)		
Option 122	Rack mount kit *3 (CLB-13,16,19)		
Option 123	Rack mount kit *2 (CLB-22)		

<sup>\*1:</sup> The specification of Noise Figure is  $\leq 7.5$ dB with Option 091. (standard spec. +0.5dB)

<sup>\*2:</sup> Size of the type with "Option 121/123" is  $88(H)\times440(W)\times350(D)$  mm.

<sup>\*3:</sup> Size of the type with "Option 122" is 88(H)×260(W)×350(D) mm