

# Compact EDFA Module

## FA 155E Series

*C-Band*



This compact Erbium Doped Fiber Amplifier (EDFA) module, FA155E is an optical fiber amplifier, which directly amplifies (without the conversion to electrical signals) C-Band (1530~1565nm) optical signals through stimulated emission that occurs when Er Doped Fiber (EDF) suited for C-Band optical amplification is pumped by a 0.98 $\mu$ m or 1.48 $\mu$ m laser diode. This product was designed to be put in a main system. Users can manage up to 255 EDFAs from one computer via a RS-232C or RS-422/RS-485 communication interface by remote control. After setting conditions, without communication functions, it also works as stand alone.

## Features

- Compact and thin: 120W x 16H x 80D (mm)
- Power supply DC+5V.
- ALC (Auto Level Control) / ACC (Auto current Control) / ATC (Auto Temperature Control).
- Available various alarm output (TTL/CMOS level).
- With communication functions, to set level and mode and display monitor are available.
- Communication interface is available for RS-232C and RS-422/RS-485.
- By multi drop structure by RS-422/RS-485, able to control up to 255 EDFAs from one PC.
- By memorizing control information to EEPROM, stand alone operation is possible after turning on a switch.

## Applications

- Optical fiber communication system
- DWDM optical communication
- Optical CATV system
- Optical analog transmission
- Optical space transmission
- Optical measurement



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# Compact EDFA Module

## Standard Specifications

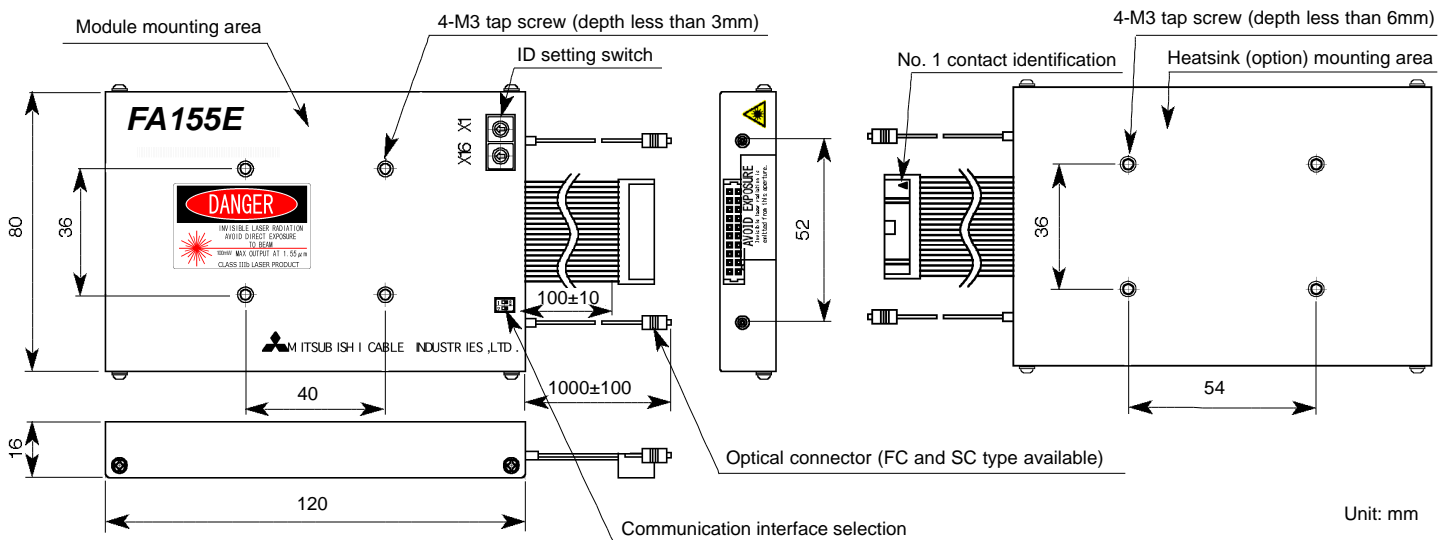
Characteristics	Standard		Low Noise		Unit	Notes
	FA155E-1375	FA155E-1675	FA155E-1360	FA155E-1660		
Output Power <sup>*1</sup>	+13	+16	+13	+16	dBm	
Noise Figure	7.5 <sup>*2</sup>		6.0 <sup>*3</sup>		dB	
3dB Bandwidth	1530 - 1565				nm	Input Signal Power: -10dBm
Polarization Dependent Gain	0.1				dB	
Optical Connector	FC Connector (SPC polished : return loss 40dB)					Available SC Connector <sup>*4</sup>
Safety Requirement	UL 1950					
Power Supply	DC +5(±5%)				V	
Dimensions	120W X 16H X 80D				mm	Excluding Protrusions
Approx. Weight	0.4				kg	

\*1 Wavelength: 1550nm, input power: +5dBm  
 \*2 Wavelength: 1550nm, input power: -10dBm

\*3 Wavelength: 1550nm, input power: -5dBm  
 \*4 APC polished connector (return loss 60dB) is also available.

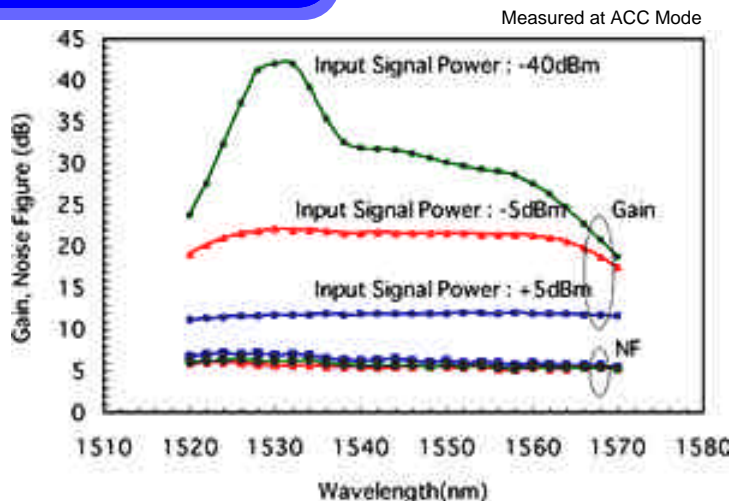
## Dimensions

Caution: Keep 4-M3 screw depth for module mounting less than 3mm



Unit: mm

## Typical Performance



The information in this document is subject to change without notice.

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Output Power <sup>*1</sup>	+13	+16	+13	+16	dBm	
Noise Figure	7.5 <sup>*2</sup>		6.0 <sup>*3</sup>		dB	
3dB Bandwidth	1530 - 1565				nm	Input Signal Power: -10dBm
Polarization Dependent Gain	0.1				dB	
Optical Connector	FC Connector (SPC polished : return loss <math>40\text{dB}</math>)					Available SC Connector <sup>*4</sup>
Safety Requirement	UL 1950					
Power Supply	DC +5(±5%)				V	
Dimensions	120W X 16H X 80D				mm	Excluding Protrusions
Approx. Weight	0.4				kg	

\*1 Wavelength: 1550nm, input power: +5dBm

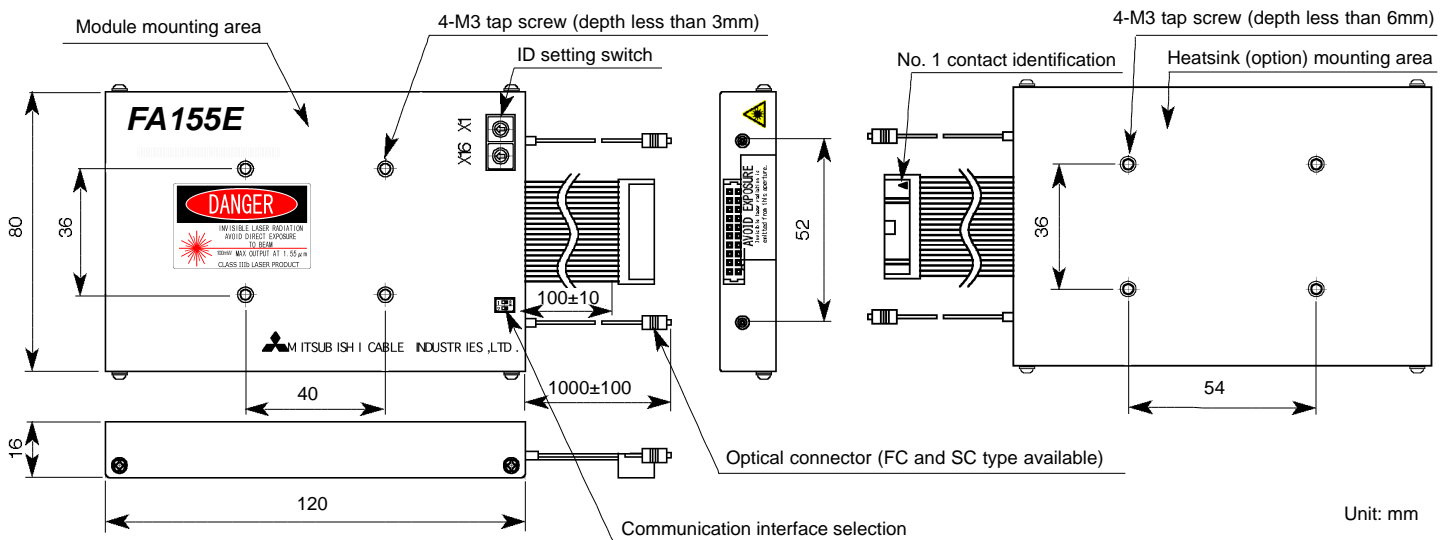
\*2 Wavelength: 1550nm, input power: -10dBm

\*3 Wavelength: 1550nm, input power: -5dBm

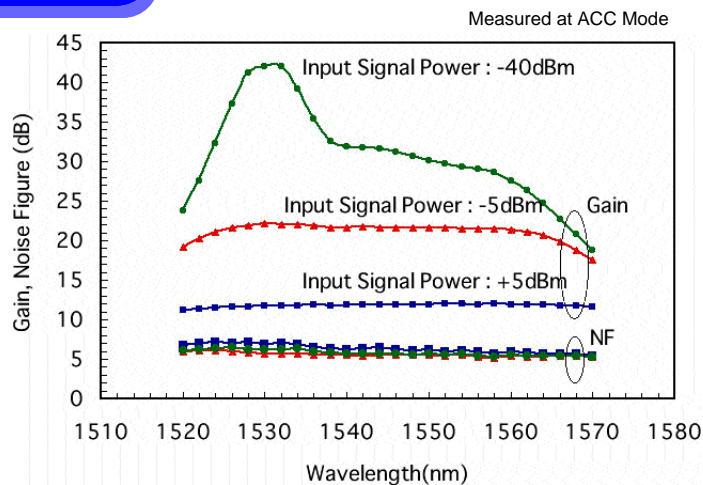
\*4 APC polished connector (return loss <math>60\text{dB}</math>) is also available.

## Dimensions

Caution: Keep 4-M3 screw depth for module mounting less than 3mm



## Typical Performance



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