

## C-band gain-flattened erbium-doped fiber amplifier(BA-GF SM 26dbm Module FC/APC)



### ● Product Description

The gain-flattened erbium-doped fiber amplifier is specially used in fiber laser or fiber communication systems. It can simultaneously amplify multiple wavelength signals in the C band and keep the gain between each wavelength consistent. The gain flatness is  $\leq 1.5$  dB. It has the ability to simultaneously amplify multiple wavelengths in a wide spectrum, as well as the advantages of gain flatness, adjustable gain, high gain and low noise.

## ● Product features

Gain flatness、 High gain coefficient、 Wide wavelength range

## ● Part Number

MP-EDFA-C-26-M-BA-GF-SM

## ● Application area

Fiber optic communication、 Fiber optic sensing、 Fiber optic laser

## ● Core parameters

| Wavelength range | Saturated output power | Gain flatness |
|------------------|------------------------|---------------|
| 1530~1565nm      | 26dbm                  | ≤1.5dB        |

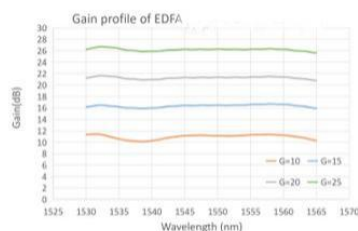
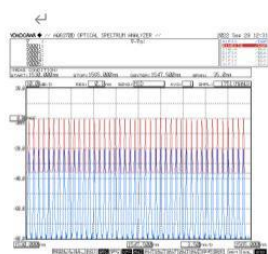
## ● General Parameters

Main Parameters:

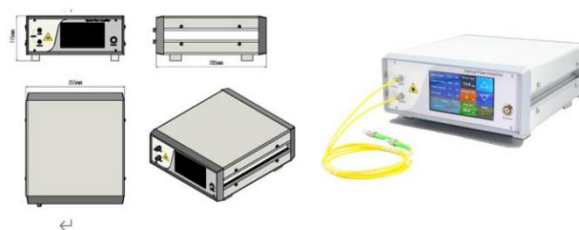
| Optical indicators | Unit | Typ         |                |         | Note         |
|--------------------|------|-------------|----------------|---------|--------------|
| Wavelength range   | nm   | 1530~1565nm |                |         |              |
| Input power        | dBm  | -45~-25     | -12~ +3        | -25~ +3 | Customizable |
| Max. output power  | dBm  | 14          | 17/20/23/25/26 |         |              |
| Adjustment range   | dB   | 25          | 25             | 25      |              |

|                               |    |                                               |           |                  |                   |
|-------------------------------|----|-----------------------------------------------|-----------|------------------|-------------------|
| Noise index                   | dB | 5                                             | 5         | 5.5              |                   |
| Working mode                  | -  | ACC/APC/AGC                                   |           |                  |                   |
| Parameter adjustment range    |    | ACC : 0~100% ; APC : 10%~100% ; AGC : 0 ~25dB |           |                  |                   |
| Gain flatness                 | dB | $\leq 1.5$                                    |           |                  | APC/AGC , 10~25dB |
| Input/output isolation        | dB | >35                                           |           |                  |                   |
| Optical power monitoring      | -  | Input and output optical power monitoring     |           |                  |                   |
| Fiber and connectors          | -  | SMF-28                                        | PM1550    | FC/APC connector |                   |
| Polarization-dependent gain   | dB | $\leq 0.3$                                    | -         |                  |                   |
| Polarization mode dispersion  | ps | 0.5                                           | -         |                  |                   |
| Polarization extinction ratio | dB | -                                             | $\geq 23$ |                  |                   |

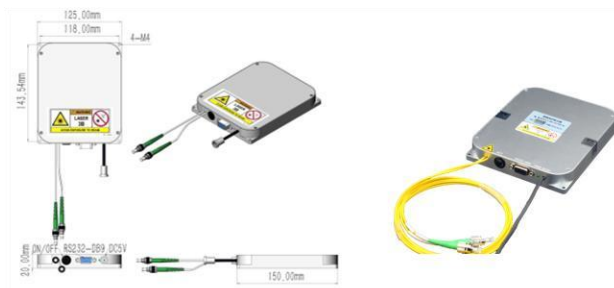
|                                                |                                          |                                   |
|------------------------------------------------|------------------------------------------|-----------------------------------|
| <b>Electrical and environmental parameters</b> | <b>Benchtop</b>                          | <b>Modules</b>                    |
| <b>Control mode</b>                            | <b>Button/RS232 serial communication</b> | <b>RS232 Serial communication</b> |
| <b>Communication interface</b>                 | <b>DB9 Female</b>                        | <b>DB9 Female</b>                 |
| <b>Power supply</b>                            | <b>100~240V AC, &lt;30W</b>              | <b>5V DC, &lt;15W</b>             |
| <b>Dimensions</b>                              | <b>260(W) × 280(D) × 120(H)mm</b>        | <b>125(W) × 150(D) × 20(H)mm</b>  |
| <b>Operating temperature range</b>             | <b>-5~ +35°C</b>                         |                                   |
| <b>Operating humidity range</b>                | <b>0~70%</b>                             |                                   |



### Dimensions:



### Desktop object and Dimensions



**M20 Modular Model and Dimensions**

### Appendix 1: Optional Configuration Table

| C-Band<br>Gain-Flattened<br>Erbium-Doped<br>Fiber Amplifier | Optional Configuration |                                                  |                              |                |                    |                     |                                           |
|-------------------------------------------------------------|------------------------|--------------------------------------------------|------------------------------|----------------|--------------------|---------------------|-------------------------------------------|
|                                                             | Working<br>wavelength  | Type                                             | Saturated<br>output<br>power | Fiber<br>Type  | Conn<br>ector<br>s | Packa<br>ge<br>Type | Optional<br>configura<br>tion<br>reserved |
| Erbium-doped<br>fiber amplifier                             | C wavel<br>ength       | Gain-flat small<br>signal amplifier<br><br>PA-GF | 11-15db<br>m                 | Single<br>Mode | FC/A<br>PC         | Modu<br>les         |                                           |

|  |  |                                       |              |                                     |  |              |  |
|--|--|---------------------------------------|--------------|-------------------------------------|--|--------------|--|
|  |  | Gain-flat power<br>amplifier<br>BA-GF | 16-20db<br>m | Polariza<br>tion<br>Maintain<br>ing |  | Benc<br>htop |  |
|  |  | Gain-flat line<br>amplifier<br>LA-GF  | 21-25db<br>m |                                     |  |              |  |
|  |  |                                       | 26-30db<br>m |                                     |  |              |  |

**Appendix 2:Part Number and Stock Number Comparison Table**

| PN#                     | Specification                                                                                                                                                                               |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MP-EDFA-C-14-M-PA-GF-PM | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened small signal amplifier PA-GF, saturated output<br>power: 14dbm, polarization-maintaining, FC/APC connector,<br>module |
| MP-EDFA-C-14-B-PA-GF-SM | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened small signal amplifier PA-GF, saturated output<br>power: 14dbm, single mode, FC/APC connector, benchtop               |

|                                |                                                                                                                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MP-EDFA-C-23/2<br>5-M-BA-GF-SM | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened power amplifier BA-GF, saturated output power:<br>23/25dbm, single mode, FC/APC connector, module              |
| MP-EDFA-C-26-<br>M-BA-GF-SM    | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened power amplifier BA-GF, saturated output power:<br>26dbm, single mode, FC/APC connector, module                 |
| MP-EDFA-C-17/2<br>0-M-BA-GF-PM | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened power amplifier BA-GF, saturated output power:<br>17/20dbm, polarization-maintaining, FC/APC connector, module |
| MP-EDFA-C-23/2<br>5-M-BA-GF-PM | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened power amplifier BA-GF, saturated output power:<br>23/25dbm, polarization-maintaining, FC/APC connector, module |
| MP-EDFA-C-26-<br>M-BA-GF-PM    | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened power amplifier BA-GF, saturated output power:<br>26dbm, polarization-maintaining, FC/APC connector, module    |
| MP-EDFA-C-26-<br>B-BA-GF-SM    | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened power amplifier BA-GF, saturated output power:<br>26dbm, single mode, FC/APC connector, benchtop               |

|                                |                                                                                                                                                                                          |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MP-EDFA-C-23/2<br>5-B-LA-GF-SM | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened line amplifier LA-GF, saturated output power:<br>23/25dbm, single mode, FC/APC connector, benchtop                 |
| MP-EDFA-C-26-<br>B-LA-GF-SM    | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened line amplifier LA-GF, saturated output power:<br>26dbm, single mode, FC/APC connector, benchtop                    |
| MP-EDFA-C-17/2<br>0-B-LA-GF-PM | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened line amplifier LA-GF, saturated output power:<br>17/20dbm, polarization-maintaining, FC/APC<br>connector, benchtop |
| MP-EDFA-C-23/2<br>5-B-LA-GF-PM | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened line amplifier LA-GF, saturated output power:<br>23/25dbm, polarization-maintaining, FC/APC<br>connector, benchtop |
| MP-EDFA-C-26-<br>B-LA-GF-PM    | C-band gain-flattened erbium-doped fiber amplifier,<br>gain-flattened line amplifier LA-GF, saturated output power:<br>26dbm, polarization-maintaining, FC/APC connector, benchtop       |