

# CONNET LASER TECHNOLOGY

## L-band High Power Optical Fiber Amplifier



### **Product Description:**

Connet MARS series L-band high power optical fiber amplifier is integrated with high power and high property multi-mode pumps, plus the double cladding fiber amplifying technology and the optimized optical structure design to realize the output power up to 5W. It has built-in laser current driver, high accuracy ATC & ACC (APC) driver electronics controller and the excellent LCD display interface in Turn-key benchtop package to realize the high stable output.

With the extensive experience in handling the double cladding fiber, Connet conducts the proper optimal optical structure design to the high power fiber amplifier to achieve the high efficiency output. The high-speed response protection circuit monitors the power of the input and the output signals automatically so that it can cut off the operation of the high power pump in case of the falling off of the input signal to ensure the safety of the whole system.

#### **Applications:**

- · Non-linearity research
- · High power amplifying
- · Fiber optic sensing
- · Optical fiber communication
- · Research & development

#### Features:

- · High output power: up to 5W
- · Low noise figure
- · High stability, high reliability
- · LCD display interface



### **Specifications:**

| Parameter                                   | Unit            | Specification                    |      |      |
|---|-----------------|----------------------------------|------|------|
|   |                 | Min                              | Тур. | Мах  |
| Part no.                                    |                 | MFAS-EY-L: SM MFAP-EY-L: PM      |      |      |
| Operating wavelength                        | nm              | 1575                             | 1590 | 1602 |
| Input power                                 | dBm             | -3                               | 0    | +10  |
| Output power @0dBm Input power <sup>1</sup> | W               | -                                | -    | 5    |
| Noise figure @0dBm Input power              | dB              | -                                | <6   | -    |
| Input/output Isolation                      | dB              | 30                               | -    | -    |
| Output power stability <sup>2</sup> (8hrs)  | %               | -                                | ±1   | ±2   |
| Input power monitoring                      |                 | Yes                              |      |      |
| Output power monitoring                     |                 | Yes                              |      |      |
| Output power tunable                        |                 | Yes                              |      |      |
| Output fiber type (SM)                      |                 | SMF 9/125um NA=0.13              |      |      |
| Output fiber type (PM)                      |                 | PM1550                           |      |      |
| Input/output fiber length                   | m               | >1                               |      |      |
| Optical connector                           |                 | FC/APC (other options available) |      |      |
| Output power tunable range                  | %               | 10                               | -    | 100  |
| Operating temperature                       | °C              | 0                                | -    | 50   |
| Storage temperature                         | °C              | -40                              | -    | +85  |
| Power supply                                | V <sub>AC</sub> | 100-240                          |      |      |
| Power consumption                           | W               | -                                | -    | 100  |
| Dimension                                   |                 | 19″ 2U                           |      |      |

## **Specifications:**

- $\cdot$  Output power is optional and related to the operating wavelength.
- · The output power stability is measured under 25°C after 30 minutes' warm-up.

## **Ordering Information:**

- · MFAS-EY-L-B-<PW>: SM
- · MFAP-EY-L-B-<PW>: PM
- · B: Benchtop
- · PW: Output power in W, e.g.: 1-1W, 5-5W