

# CEFA-C-WDM-X2 SERIES

## CW ERBIUM FIBER AMPLIFIER C-Band for Wavelength Division Multiplexing "2 in 1 version"

### Key Features

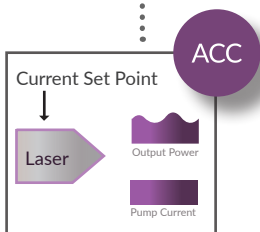
- 2 amplifiers in the same package
- Output Power up to +23 dBm
- Fixed Gain (FG) or Variable Gain (VG)
- BO-PA, BO-BO, PA-PA, ILX2 configurations
- Independent control mode
- Low noise figure
- Gain-Flattened for Wideband Amplification
- ACC, APC and AGC modes
- Low Power Consumption
- Mid Stage Access
- Compact Form Factor Modules or highly sophisticated rack

### Applications

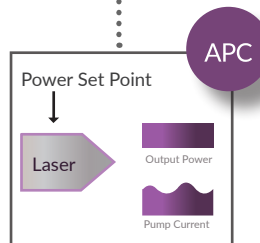
- Long Haul and Metro Networks
- Transmitter and Receiver Amplification
- Wideband DWDM systems

### Modes of operation

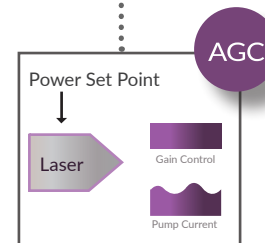
The devices offer several modes of operation :



ACC (Automatic Current Control) mode is standard for all devices. The pump lasers are maintained constant for this mode.



APC : (Automatic Power Control) mode allows to control the amplifier at a fixed output power per port. The device maintains constant the optical output power monitored with a photodiode. The pump currents are adjusted automatically.



AGC : (Automatic Gain Control) mode allows to control the amplifier at a fixed gain. The device maintains constant the gain using input and output monitoring photodiodes. The pump currents are adjusted automatically. This mode includes ASE (Amplified Spontaneous Emission) compensation.

### SUB-SYSTEMS CONTINUOUS FIBER AMPLIFIERS



The CEFA-C-WDM-X2 series amplifiers provide two amplifiers in the same package for multi channels amplification over the C-Band where gain flattening is required.

The amplifiers can be optimized to performed as boosters (BO) , in-lines (IL) or pre-amplifiers (PA) in systems and subsystems for metro and long haul applications. They operate in constant gain, constant power or constant current mode.

A RS232 communication port permits the user to configure the product and to monitor parameters and alarms.

Units in rack platforms include a SNMP supervision with an embedded web server.

### 4 Platforms



S401 COMPACT  
S403 LARGE  
T100 19" 1U Rack AC Version  
K121 19" 3U Multi slots Rack

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### ELECTRO-OPTICAL CHARACTERISTICS

| SPECIFICATIONS               | CEFA-C-WDM-X2                              |
|------------------------------|--|
| Mode of Operation            | CW   |
| Polarization                 | Random                                     |
| Saturated Output Power       | From +8 dBm to + 23 dBm                    |
| Wavelength range             | Typ. 1529-1562nm                           |
| Polarization Mode Dispersion | < 0.5 ps                                   |
| Polarization Dependent gain  | < 0.5 dB                                   |
| Operating Modes              | ACC , APC, AGC                             |
| Operating Temperature        | -5°C/65°C (Case temperature)               |
| Storage Temperature          | -40°C/ +85°C                               |
| Power consumption            | From 3.5W to 20W ; Depends on output power |

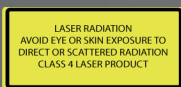
### RELIABILITY

The Lea Photonics range of fiber amplifiers are manufactured with tested components and are submitted to several inspections during the manufacturing process under a rigorous quality management certified in accordance with the ISO 9001:2008 standard. Our all-in-fiber systems offer maintenance free operation. Countless units are continuously running in demanding environments with no failure.

### GUARANTEE

Our fiber systems are under 1 full year parts and labor guarantee. We offer a warranty extension of 1 or 2 years. Please contact us.


For ordering information and custom solutions, please contact us : [websales@lea-photonics.com](mailto:websales@lea-photonics.com)




LEA Photonics undertakes a continuous and intensive product development program to ensure that its products perform to then highest technical standards. As a result, the specifications in this document are subject to change without notice.



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