

### SCIROCCO-BT-1950

# 1-5W Broadband Tm-Fiber Amplifier

### **Key Features**

• Small signal gain: 40 dB

• Low Noise figure: <5dB

Saturated Pout

- 1W (30dBm)

- 2W (33dBm)

- 5W (37dBm)

Bandwidth 1880 to 2020nm

Single frequency operation

Single mode, M<sup>2</sup> ~ 1

SM & PM fiber versions

RS 232-USB interface

Amplifier protection for LOS

amplifier (TDFA) covering the spectral window from 1880nm to 2020nm. This eye safe TDFA is designed for amplification in fiber systems requiring a combination of high gain and low noise figure (NF). Up to 40 dB small signal gain with an NF of less than 5 dB power are available at 1950nm. In saturation, this amplifier delivers an output power of  $\pm 30/33/37$ dBm( $\pm 1/2/5$  W) over a 140nm optical bandwidth with an in-band OSNR greater than 50 dB.

The Cybel SCIROCCO-BT-1950 is a broadband Thulium-doped fiber

The SCIROCCO-BT-1950 comes in a 19 inch rack mounted benchtop unit for both the standard single mode and polarization maintaining fiber versions. A loss of signal (LOS) protection is available as an option. All the amplifier operating parameters, as well as ACC and APC modes, are controlled via a RS 232 port.

## **Applications**

- Test and measurement
- · Optical preamplifier
- LIDAR
- Interferometry

#### **SKYLINE SERIES**

Also available at different standard wavelengths with same high performance and compact footprint:

- MANTARAY-1060
- STINGRAY-1550
- SCIROCCO-1950
- ♦ HELIOS-2100





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## SCIROCCO-BT-1950 Specifications

| OPTICAL                        | Unit  | Value                 | Comment                         |
|--------------------------------|-------|-----------------------|---------------------------------|
| Center wavelength              | nm    | 1880-2020             | 3 dB small signal BW            |
| Small signal gain              | dB    | >40                   | Pin 30dB @ 1950nm               |
| Minimum output power           | dBm/W | +30/33/37dBm (1/2/5W) | @0 dBm Pin, 1950nm              |
| Noise figure                   | dB    | <5                    | @-30dBm Pin                     |
| Polarization ext. ratio.       | dB    | ≥ 17                  | PM version                      |
| Beam quality (M <sup>2</sup> ) | $M^2$ | ~1                    |                                 |
| Output isolator                | dB    | 30                    | SM or PM version                |
| In/out fiber length            | m     | 1                     | Armored cable FC/APC connectors |
| Fiber type                     |       | Standard or PM        | SM or PM 1950-low bend loss     |
| Monitor fiber length           | m     | 1                     | Armored cable                   |
| ELECTRICAL                     |       |                       |                                 |
| Voltage                        | ٧     | 110-220               |                                 |
| Warm-up time                   | Min   | 20                    |                                 |
| Power consumption              | W     | 30                    | @Pout=1W                        |
| Control interface              |       | RS 232                |                                 |
| Control mode                   |       | ACC-APC               |                                 |
| GENERAL                        |       |                       |                                 |
| Dimensions                     | Inch  | 19                    | 2U Rack mountable               |
| Storage temperature            | °C    | -20 to 65             |                                 |
| Operating temperature          | °C    | 10 to 40              |                                 |
| Humidity                       | %     | 5 to 95               | Non-condensing                  |

#### **CUSTOMIZATION**

The **SCIROCCO-BT-1950** is a laser platform that can be customized to match Customers' specific requirements. Please contact Cybel.

**COMPLIANCE with Regulatory Requirements:** These benchtop products are Class 4 lasers as designated by the Center for Device and Radiology Health ( CDRH ). As such they are intended only in integration into other equipment and do not comply with CDRH requirement. It is the customer responsibility for CDRH certification of the full system that incorporates this industrial laser.





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