



CoBrite DX – Tunable Laser

Features

- ✓ Hosts 1,2 or 4 laser ports
 - ✓ Polarization Maintaining Output
- √ 5 Laser variants available
- ✓ Line width down to < 25kHz
- Remote control
 - ✓ USB & Ethernet connectivity
 - ✓ SCPI Style commands
- ✓ Integrated Web Server for browser-based control
 - Access device from any smartphone or PC via Browser
- Large Touch Display Panel for intuitive local control
- √ 19" Rack mountable
 - √ 2HE 19" Half width

Applications

- ✓ DWDM transport testing
- ✓ coherent Transmission
 - ✓ Local Oscillator
 - ✓ Transmitter Laser
- √ versatile Light source



CoBrite is a versatile tunable Laser light instrument that allows standalone operation by an intuitive local touch display. The chassis can be equipped with 1, 2 or 4 tunable lasers and 5 laser variants to meet your specific needs. Mixing of Laser types is possible.

Remote operation via an integrated web server allows control using any browser-based device such as smartphones eliminating the need for complex software installations.

An integrated AC power supply makes this solution ultra portable while it is compatible with the 19" rackmount standard.

Automated remote control is achieved via USB or Ethernet by SCPI command control.

Optical connectors are tool-free user removable allowing instant access for fiber cleaning.

| Optical Parameter | | Laser Type | Laser Type | Laser Type | Unit |
|---|--|---|--|--|-------|
| | | N | S | G | OTHE |
| Frequency range; inquire for customized customized carameters | C – Band L – Band X – Band C + L – Band (LC) | 190.70 – 196.65 (1524.5 - 1572nm) 186.00 – 191.1 (1568.8 – 1611.7nm) 184.30 - 190.5 (1573.7 - 1626.65nm) 186.00 - 196.65 (1524.5 - 1611.7nm) | 191.12 – 196.25 (1527.6 – 1568.6nm) Not available | 191.1 – 196.25 (1527.61 – 1568.77nm) Not available | THz |
| Channel Spacing | | Continuous | Continuous | Continuous | GHz |
| Frequency fine tune resolution | | 1 | 10 | 1 | MHz |
| Frequency fine tune range | | +/- 6 | +/- 10 | +/- 6 | GHz |
| Optical Power tuning range for any frequency | C Band L Band X Band C + L Band | 10.0 - 16.0 9.0 - 14.5 13 - 16 6.8 - 10.5 | 8.8 – 17.8 (17.0 dBm EOL) – | 9.5 – 15.5 - | dBm |
| Spectral Line width; 3dB instantaneous, 3.5us (Lorentzian contribution) | | < 100 25 typical | 80 typical < 100 (Pout < 16dBm) < 150 | < 100 25 typical | kHz |
| Frequency accuracy over Lifetime Over 24 hours | | +/- 2.5 0.3 | +/- 1.5 0.3 | +/- 2.5 0.3 | GHz |
| SMSR; Side mode suppression ratio; measured with 0.1nm RBW | | > 40 55 typical | > 40 | > 40 55 typical | dB |
| RIN (10MHz to 3GHz) | | -145 (10 MHz to 22GHz, 11dBm) | -140 (100kHz – 20MHz), average -150 (20MHz – 1GHz) | -145 (10 MHz to 44GHz, 7dBm) | dB/Hz |
| Power accuracy over tuning range | | +/- 0.5 | +/- 0.5 | +/- 0.5 | dB |
| Tuning speed (max/typical) | | 15 / 10 | 2 / 1.0 | 15 / 10 | S |
| Output Connector | | FC/APC, FC/PC or SC/PC | | | |
| Output power accuracy over Lifetime Over 1 hour Over 24 hours | | | -/+1 +/- 0.01 (typ.) +/- 0.03 (typ.) | | dB |
| Output power setting resolution | | | 0.1 | | dB |
| Optical Fiber | | Polarization | - maintaining PANDA type I | Fiber, PER > 18dB, 25typ. | |
| | | Device Pa | rameter | | |

| WL Freq. FTF | 193.0 | 329 nm 0000 THz 0 GHz 15.9 dBm | 1553.329 1 15.91 dBm | | | |
|---------------------|-----------------|---|-------------------------|--|--|--|
| SETTINGS LASER 1 | DEVICE SETUP | TURN ALL LASERS OFF | | | | |
| Touch Panel | | | | | | |

| Device Parameter | TOOL TOOL TOOL TOOL | -,, |
|---------------------------------------|---|------------------|
| Operating Temperature | 0 to 40°C | non-condensing |
| Storage Temperature | -20°C to 60°C | non-condensing |
| Size of device (H x W x D), weight | 89 x 206 x 235mm 3.51" x 8.12" x 9.06" | 3 kg 6.6 lbs |
| Power Supply | 100-240 VAC, 0.5A, | 50/60Hz, 35 Watt |

Ordering Information

* APC type connector only

-XY-XY-XY **CBDX** -XX Article Laser Configuration, per Port: Connector CoBriteDX X: Laser Type (N,S,G*) FA = FC/APC Y: Laser Band - (C, L, X) band FP = FC/PC XY = LC - C + L band option, 2 laser ports max. SP = SC/PCXY = NN: No laser equipped

Example: CBDX-NC-SC-NN-NN-FA: 2 Laser ports with 1 NC & 1 SC type, FC/APC connector

Accessory

CBDX-ACC-RM-x

19" Adaptor plate for rack mount, 2 HE 1: 1 Laserchassis; 2: 2 Laser chassis



Invisible Laser Radiation Class 1M Laser Product EN 60825-1: IEC 60825-1

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