

# CoBrite<sub>DX4</sub> - Laser

## Features

- ✓ Ultra compact ; 1,2 or 4 lasers
- ✓ Polarization Maintaining Fiber
- ✓ Several Laser variants available
  - ✓ Fully tunable; narrow line width
  - ✓ 50GHz grid tunable; narrow line width
  - ✓ 50GHz grid tunable; standard line width
- ✓ Line width down to < 25kHz
- ✓ Remote control
  - ✓ USB & Ethernet connectivity
  - ✓ SCPI Style commands
- ✓ Easy-to-use pictographic GUI
- ✓ 19" Rack mount adapter available

## Applications

- ✓ DWDM transport testing
- ✓ ready for data rates 100G+
- ✓ coherent Transmission
  - ✓ Local Oscillator
  - ✓ Transmitter Laser
- ✓ versatile Light source

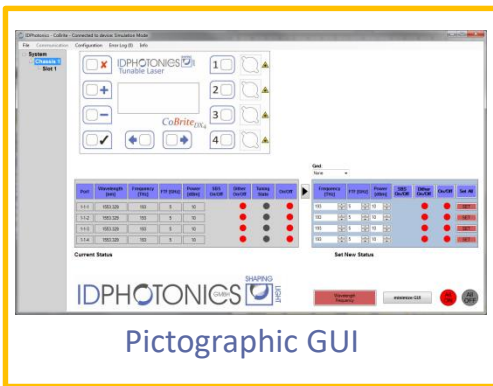


*CoBrite<sub>DX4</sub>* is a versatile tunable Laser light instrument that allows standalone operation by a local display which eliminates the need for complex software installations. It makes this solution ultra portable.

The chassis can be equipped with **1,2 or 4** tunable lasers to meet your specific needs. SCPI command control empowers users to setup and perform complex automated tasks within minutes being 100% compatible to our *CoBrite<sub>MX</sub>* chassis series.

Remote operation via USB or Ethernet is easily accomplished by a pictographic GUI that allows control over all relevant parameters.

| Optical Parameter   | Continuous tuning Laser (H01)                               | ITU Grid tuning Laser (C01)                                    | Standard ITU tunable Laser (W01)    | Unit  |
|---|---|--|-------------------------------------|-------|
| Frequency range; C – Band<br>L – Band<br>C&L – Band                     | 191.3 – 196.25<br>186.35 – 190.95<br><b>186.25 - 196.25</b> | 191.7 – 196.1<br>186.5 – 190.9<br>–                            | 191.7 – 196.1<br>186.5 – 191.1<br>– | THz   |
| Channel Spacing   | Continuous  | 50   | 50                                  | GHz   |
| Frequency fine tune resolution  | 1   | 1  | –                                   | MHz   |
| Frequency fine tune range   | +/- 12GHz   | +/- 15GHz  | –                                   | GHz   |
| Optical Power range C Band<br>L Band<br>C&L Band                        | 6 – 15.5<br>7 – 14<br>3 – 10                                | 15.5<br>14<br>–  | 8 – 14<br>5 – 11<br>–               | dBm   |
| Spectral Line width; 3dB instantaneous, 3.5us (Lorentzian contribution) | < 100<br>25kHz typical                                      | Typical : 300<br>Max: 500                                      | Typical : 800<br>Max: 5000          | kHz   |
| Frequency accuracy over Lifetime Over 24 hours                          |   | +/- 1.5<br>+/- 0.3GHz  | +/- 1.8                             | GHz   |
| SMSR; Side mode suppression ratio                                       |   | >40 (50typ.)   | >40 (45typ.)                        | dB    |
| RIN (10MHz to 3GHz)   |   | < -145 (up to 40GHz)   | <-145                               | dB/Hz |
| Output Connector  |   | FC/APC, FC/PC or SC/PC   | FC/PC or SC/PC                      |       |
| Output accuracy over Lifetime Over 1 hour<br>Over 24 hours              |   | -/+1 (1.3 for C&L Band)<br>+/- 0.01 (typ.)<br>+/- 0.03 (typ.)  |                                     | dB    |
| Output power setting resolution   |   | 0.01   |                                     | dB    |
| Optical Fiber   |   | Polarization- maintaining PANDA type Fiber, PER > 20dB, 25typ. |                                     |       |



Pictographic GUI

## Device Parameter

Operating Temperature 0 to 40°C non-condensing

Storage Temperature -20°C to 60°C non-condensing

Size of device 85 x 171 x 350mm  
(H x W x D) 3.3" x 6.7" x 13.8"

Power Supply 100-240 VAC, 0.5A, 50/60Hz

## Ordering Information

| CBDX4      | -X  | -X  | -XXX              | -XX                                     |
|------------|---|---|-------------------|---|
| Article    | No of Lasers  | Band  | Variant           | Connector                               |
| CoBriteDX4 | 1<br>2<br>4*  | C = C - Band<br>L = L - Band<br>CL = C&L Band | H01<br>C01<br>W01 | FA = FC/APC<br>FP = FC/PC<br>SP = SC/PC |
| CBDX4-19-x | 19" Adaptor plate for rack mount, 3 HE<br>1: 1 Laserchassis; 2: 2 Laser chassis |   |                   |   |

\* no C&L Band

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