

# CoBrite<sub>DX1</sub> - Laser

## Features

- ✓ Ultra compact
- ✓ Polarization Maintaining Fiber

### Continuously tunable Variant

- ✓ Line width < 100kHz
- ✓ Output power tunable from 6.0dBm up to 16.0dBm
- ✓ tunable to any Frequency; 1MHz step size Fine Tuning

### ITU Grid tunable Variant

- ✓ Typ. Line width 300kHz
- ✓ tunable to 50GHz ITU Grid, +/-15GHz; 100MHz step size Fine Tuning
- ✓ Cost efficient coherent transmission

### General purpose tunable Variant

- ✓ General purpose tunable laser at cost of a DFB source
- ✓ tunable to 50GHz ITU Grid
- ✓ Ultra cost efficient

## Applications

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

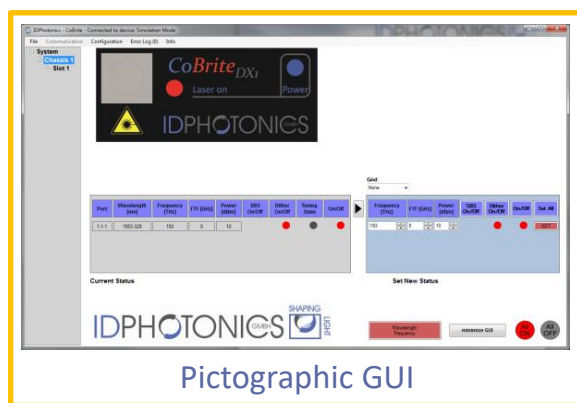


CoBrite<sub>DX1</sub> is a versatile tunable Laser light source that is easy to set up using any PC's standard USB port by an easy-to-use GUI. Multiple devices can be operated on a single PC allowing easy control even for high count multi-channel applications. Remote operation control via SCPI style commands empowers users to setup and perform complex automated tasks within minutes being 100% compatible to our CoBrite<sub>MX</sub> chassis series.

Once set up, CoBrite<sub>DX1</sub> will operate autonomously even without PC on last setting by it's built-in set & forget feature. A save last state feature allows to recover at last setting including on/off state after a power cycle.



Optical Parameter	Continuous tuning Laser (H01)	ITU Grid tuning Laser (C01)	Standard ITU tunable Laser (W01)	Unit
Frequency tuning range; C – Band L – Band	191.3 – 196.25 186.35 – 190.95	191.7 – 196.1 186.5 – 190.9	191.7 – 196.1 186.5 – 191.1	THz
Channel Spacing	Continuous	50	50	GHz
Frequency fine tune resolution	1	1	–	MHz
Frequency fine tune range	+/- 12GHz	+/- 15GHz	–	GHz
Optical output Power range; C Band L Band	6 – 15.5 7 – 14	15.5 14	8 – 14 5 – 11	dBm
Spectral Line width; 3dB instantaneous, 3.5us	<100 25kHz typical	Typical : 300 Max: 500	Typical : 800 Max: 5000	kHz
Frequency accuracy over Lifetime Over 24 hours		+/- 1.5 +/- 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 power accuracy over Lifetime Over 1 hour Over 24 hours			-/+1 +/- 0.01 (typ.) +/- 0.03 (typ.)	dB
Output power setting resolution			0.01	dB
Optical Fiber	Polarization- maintaining PANDA type Fiber, PER > 20dB, 25typ.			



Mechanical Parameter		
Operating Temperature	0 to 40°C	non-condensing
Storage Temperature	-20°C to 60°C	
Size of device (H x W x D)	32 x 82 x 150mm	1.3" x 3" x 6"
Power Supply	100-240 VAC, 500mA, 50/60Hz	

### Ordering Information

CBDX1	-X	-X	-XXX	-XX
Article	No of Lasers	Band	Laser Variant	Connector
CoBriteDX1	1	C = C - Band L = L – Band	H01 C01 W01*	FA = FC/APC FP = FC/PC SP = SC/PC

\* PC type only

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