

# CoBrite DX2 - Tunable Laser

## Features

- ✓ **Hosts 1 or 2 laser ports**
  - ✓ Polarization Maintaining Output
  - ✓ Local on/off button
- ✓ **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
- ✓ **19" Rack mountable**
  - ✓ 1HE – 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.

The chassis can be equipped with 1 or 2 tunable lasers to meet your specific needs. Mixing of laser variants 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 external AC/DC power supply ensures ultimate compactness of the laser chassis.

Automated remote control is achieved via USB or Ethernet by SCPI command control. It empowers users to setup and perform complex automated tasks within minutes.

Optical Parameter	Laser Type N	Laser Type S	Laser Type G	Unit
Frequency range; C – Band L – Band C + L – Band	190.70 – 196.65 (1524.5 - 1572nm)	191.12 – 196.25 (1527.6 – 1568.6nm)	191.1 – 196.25 (1527.61 – 1568.77nm)	THz
	186.00 – 191.1 (1568.8 – 1611.7nm)	Not available	Not available	
	186.00 - 196.65 (1524.5 - 1611.7nm)			
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 10.0 – 16.0	8.8 – 17.8	9.5 – 15.5	dBm
	L Band 9.0 – 14.5	(17.0 dBm EOL)	-	
	C + L Band 6.8 – 9.7	-	-	
Spectral Line width; 3dB instantaneous, 3.5us (Lorentzian contribution)	25 typical < 100	80 typical < 100 (Pout < 16dBm) < 150	25 typical < 100	kHz
Frequency accuracy over Lifetime Over 24 hours	+/- 2.5	+/- 1.5	+/- 2.5	GHz
	0.3	0.3	0.3	
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 – 44GHz, 7dBm	-140 (100kHz – 20MHz) -150 (20MHz – 1GHz)	-145 10 MHz–44GHz, 7dBm	dB/Hz
Power accuracy over tuning range	+/- 0.5 C + L variant +/- 0.9	+/- 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				dB
Output power setting resolution	0.1			dB
Optical Fiber	PM - PANDA Type Fiber, PER > 18dB, 25typ., E-Field on slow axis, aligned to connector key			



### Device Parameter

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)	45 x 136 x 179mm 1.77" x 5.35" x 7.04"	
Power Supply (external, included)	100-240 VAC, 0.5A, 50/60Hz, 12VDC, 1.5A input at unit	

### Ordering Information

\* APC type connector only

CBDX2	-XY-XY	-XX
Article	Laser Configuration, per Port:	Connector
CoBriteDX2	X: Laser Type (N,S,G*) Y: Laser Band - (C, L) band XY = LC – C + L band option, 1 laser port max. XY = NN: No laser equipped	FA = FC/APC FP = FC/PC SP = SC/PC

Example: CBDX2-NC-NN-FA: 1 Laser port, NC type. FC/APC connector

### Accessory

CBDX2-ACC-RM-x	19" Adaptor plate for rack mount, 1 HE 1: 1 Laserchassis; 2: 2 Laser chassis
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