IDPHOTONICS GMBH
SHAPING LIGHT

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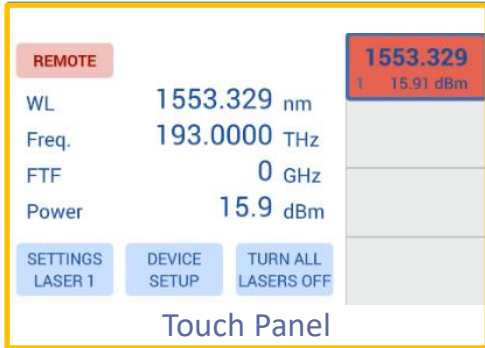
Remote operation via an integrated web server allows control using any browser-based device such as smartphones eliminating the need for complex software installations.

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 N	Laser Type S	Laser Type G	Unit
Frequency range;	C – Band	190.70 – 196.65 (1524.5 - 1572nm)	191.12 – 196.25 (1527.6 – 1568.6nm) Not available	191.1 – 196.25 (1527.61 – 1568.77nm) Not available	THz
	L – Band	186.00 – 191.1 (1568.8 – 1611.7nm)			
	C + L – Band	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 (17.0 dBm EOL)	9.5 – 15.5	dBm
	L Band	9.0 – 14.5		-	
	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 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 44GHz, 7dBm)	-140 (100kHz – 20MHz) -150 (20MHz – 1GHz)	-145 (10 MHz to 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		-/+1 +/- 0.01 (typ.) +/- 0.03 (typ.)			dB
Output power setting resolution		0.1			dB
Optical Fiber		Polarization- maintaining PANDA type Fiber, PER > 18dB, 25typ.			

Inquire for customized parameters

Touch Panel

REMOTE

WL	1553.329 nm
Freq.	193.0000 THz
FTF	0 GHz
Power	15.9 dBm

1553.329
1 15.91 dBm

SETTINGS LASER 1 | DEVICE SETUP | TURN ALL LASERS OFF

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)	89 x 206 x 235mm 3.51" x 8.12" x 9.06"	
Power Supply	100-240 VAC, 0.5A, 50/60Hz	

Ordering Information

* APC type connector only

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

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

RoHS compliant

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

V1.6

Subject to change without further notice