

Ecomb200_DX / Ecomb 200_DX_LN

Fully automated, high-performance erbium frequency comb compatible with even the most demanding metrology applications. Integrated high-performance digital locking electronics provides turn-key operation with low phase noise, low timing jitter and high frequency stability all in one package.



Features

- 200 MHz repetition rate
- Fully automated f_{ceo} and f_{beat} lock
- All PID channels are monitored and programmable
- Servo bandwidth > 100 kHz
- Built-in counter
- Built-in IQ diagram
- Built-in phase meter
- 1 high power output
- Fully compatible with IMRA's high power fiber amplifiers & wavelength extension systems
- Remotely controllable through Ethernet

S-version

- Can be locked to any optical reference in C-band
- 1 output for seeding additional amplifier

LS-version

- Up to 10 additional outputs for seeding additional amplifiers
- High coherence 1050 – 2200 continuum output
- Optionally can be locked to any optical reference from 530 – 2000 nm

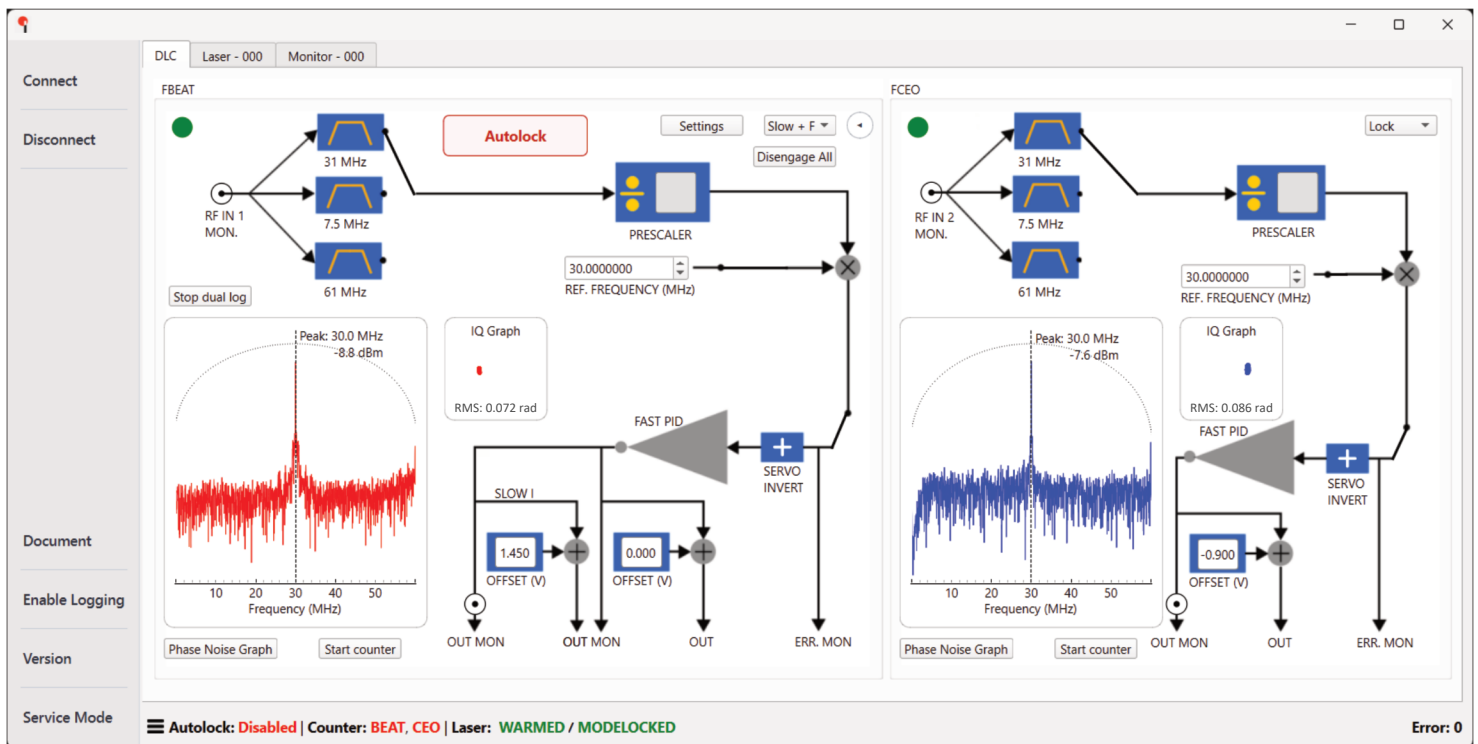
Ecomb 200_DX / Ecomb 200_DX_LN specifications	
Rep. rate	200 +/- 1 MHz
Tuning range	± 1 MHz
F_{ceo} , F_{beat} Control bandwidths	> 100 kHz
High power output	> 10 mW
F_{ceo} S/N ratio	> 40 dB at 100 kHz resolution
Supercontinuum output	1050 – 2200 nm*
Phase locking electronics	built-in, fully automated
F_{ceo} phase noise	< 150 mrad**
F_{beat} phase noise	< 100 mrad***
F_{ceo} tuning range	> 200 MHz
System size	2U****
Power consumption	< 50 W

* Only in LS version

** <150 mrad with Ecomb_DX_LN; <400 mrad with Ecomb_DX

*** <100 mrad with Ecomb_DX_LN; <150 mrad with Ecomb_DX

**** 2U in S version, 3U in LS version



Graphic representation of configuration options as seen on a computer interface



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