

Ecomb-200T: Erbium Fiber Comb

Table-top-mounted, ultra-low noise

IMRA America offers a frequency comb for easy integration with research applications commonly arranged on an optical table. The comb is an all-fiber based platform with fiber-coupled outputs featuring a compact, table-top-mounted design with low power consumption, while also providing ultra-low phase noise and a high level of frequency stability.

Features

- 200 MHz repetition rate
- 300 kHz repetition rate tuning range
- PM fiber-coupled output
- Integrated f_{ceo} detection
- High coherence 1050 - 2200 nm continuum
- Vibration and temperature insensitive
- Compatible with IMRA ULC locking electronics
- In-field replaceable pump diodes
- Remote operation via ethernet

Available Extensions

- 2 W Er comb
- 5 W Tm comb
- High coherence visible continuum
- Clock wavelength outputs selectable from 530 - 1200 nm
- > 10 mW mid-IR comb
- Radiation-hardened design
- OEM versions



Ecomb-200T Specifications	
Repetition Rate	200 ± 0.5 MHz
Tuning Range	> ± 300 kHz
F _{rep} Control Bandwidth	> 500 kHz
Free-running f _{ceo} SN	> 35 dB at 100 kHz resolution
Supercontinuum Output	1050 - 2200 nm
Outputs via PM FC/APC-coupled Fiber	2.0 meter
Power per Port	> 5 mW
High Power Port Option 1	> 450 mW (with separate unit)
High Power Port Option 2	> 2.0 W (with separate unit)
Center Wavelength per Port	1560 ± 20 nm
Spectral Width per Port	> 25 nm at -3 dB point
Monitor Port Power	> 1 mW
System Size	370 x 234 x 160 mm
Storage Temperature	-20 °C to +50 °C
Warm-up Time	< 2 hours
Operational Temperature	20 ± 2.5 °C
Power Consumption	< 50 W
Interlock	Via Lemo Connector
Laser On/Off	Via PC

Compatible with IMRA's
Universal Locking Electronics (pictured)



Product Features

- Up to 6 PM fiber-coupled outputs
- Tunable repetition rate via PC
50 - 200 MHz available
- > 300 kHz f_{ceo} control bandwidth
available, upon request



*Er-fiber comb is currently not certified to the Laser Product Performance Standard from the U.S. FDA/Center for Devices and Radiological Health (CDRH). U.S. federal regulations require that lasers that are not certified to the CDRH standard be sold only to manufacturers of electronic products for use as components in such products.

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