

Data sheet *custom laser*

20th of May 2015

Custom designed femtosecond pump laser for operation with Rainbow Photonics AG systems: **TeraSys**[®] and **TeraKit**[®]

High power ultrafast Erbium fiber laser system including:

- Ring fiber oscillator
- High-power core-pumped fiber amplifier
- Polarization maintaining fibers only
- Motorized prism pulse compressor
- Compact power supply with built-in PC

Specifications:

- Center wavelength 1570 nm
- Average output power > 240 mW
- Pulse width < 35 fs.
- Repetition rate 80 MHz only
- Linear polarization > 95% (vertical)
- Beam shape TEM₀₀, M. < 1.2, . typ. 1.8 mm (1/e)
- Beam divergence < 1 mrad
- Output coupling: free-space

Additional

Electrical monitor output (1 GHz)

- Interfaces: Ethernet, USB, RS232
- Secondary oscillator seed output (FC/APC)

Dimensions (H x W x D):

- Laser Head: 151 x 280 x 229 mm
- Control Unit: 140 x 235 x 315 mm

Weight:

Laser Head: < 10 kg

Control Unit: < 4.5 kg

Operating temperature range: 20 ...30 °C

Environment humidity: non-condensing

Electrical:

- Line input: 90 - 260 VAC, 47 - 63 Hz
- Power consumption: < 40 W

Warranty:

- 5000 h or 1 year (whatever applies first) from the date of delivery excluding laser diodes.

Installation, service, and training.