HIGH Q LASER®
THINK ULTRAFAST!™

*femto*TRAIN™ Ti:Sapphire

Compact, all-diode-pumped, solid state femtosecond oscillator

Most compact Ti:Sapphire Oscillator in the market!!

*femto*TRAIN™	IC-800-200	IC-800-400	IC-800-200 LP
Wavelength[1]	790 nm, 800 nm, 810 nm, 850 nm or 870 nm +/- 5 nm		
Pulse width (FWHM), typical[2]	< 100 fs, < 300 fs	< 100 fs	5-50 ps
Average output power	> 200 mW	> 400 mW	> 200 mW
Pulse repetition rate[3]	73 MHz		
Laser material	Ti:Sapphire ($Ti:Al_2O_3$)		
Power stability, typical	< 1 % RMS (12h)		
Beam quality	TEM_{00}; $M^2 \leq 1.2$		
Polarization	horizontal / vertical (TBD)		
Power supply	90 VAC - 240 VAC, 50/60 Hz, < 300 W		
Laser head size	530 x 200 x 75 mm^3 (l x w x h)		
Beam height	50.8 mm (2"), nominal, not including pedestals		
Controller size	470 x 200 x 88 mm^3 (l x w x h), fits into 19" rack		
Chiller	400 x 200 x 557 mm^3 (l x w x h), 110 VAC or 240 VAC, 50/60 Hz, < 2000 W (incl. heater)		
Operation ambient temperature	18 °C to 30 °C		

All specifications are typical data and subject to change without notice in order to provide the best product possible.
1) select value (power depends), other wavelengths on request
2) different pulse widths down to 50 fs and up to 50 ps on request
3) +/- 1MHz, other pulse repetition rates on request (10 - 200 MHz)

Main Features	Customer benefits
• Integrated industrial green DPSSL as pump	• Compact all-in-one setup
• Passive self-starting modelocking with saturable Bragg reflector	• USB software remote control
• Single phase power supply	• Hands-free, true turnkey operation
• Sealed-off technology	• High temporal and spatial stability
• Air-cooled closed-loop chiller (included)	• Synchronised IR, SH, TH or FH beams (optional)
• FEA optimized industrial mirror mounts	• High beam quality

www.highQlaser.at
www.highQ-us.com

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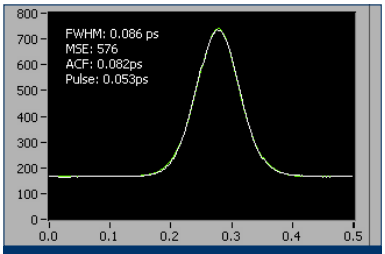
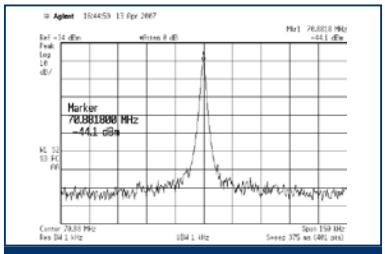
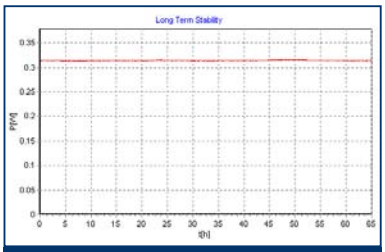


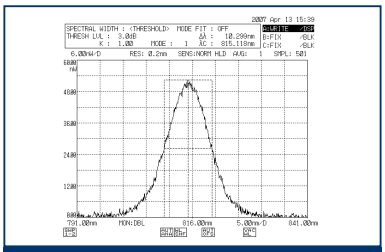
Typical Intensity Autocorrelation
Autocorr. duration 82 fs
Pulse duration 53 fs



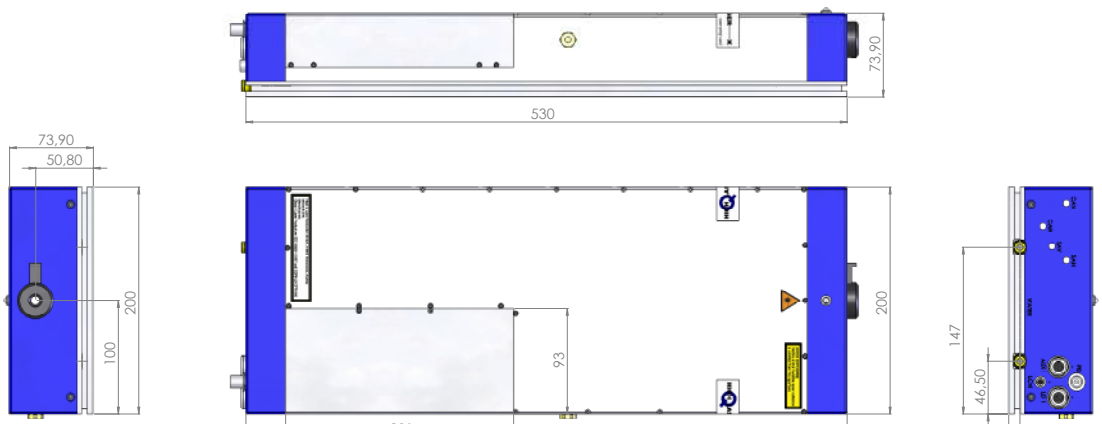
Typical Electrical RF Spectrum
Span 150 kHz, Resolution 1 kHz
Side-band suppression > 70 dB



Typical Power Stability
Measurement duration 65h
Mean 314 mW, RMS 0.11%



Typical Wavelength Spectrum
Center wavelength 815 nm
Bandwidth 10.3 nm



Applications

- THz Generation
- Multi-Photon Imaging
- Two-Photon-Polymerisation
- Femtosecond Laser Dissection
- Two-Photon Microscopy
- Ultrafast Spectroscopy

Please Inquire About

- Long pulse version up to 50 ps
- Pulse duration from 50 fs to 50 ps
- Frequency conversion (SHG – THG – FHG)
- Femtosecond amplifiers
- Application laboratory for Nano Processing
- Synchronisation "SYNC" option
- OEM and customized models

CE

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