

femtoTRAIN™ UC Industrial

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



femtoTRAIN™	UC-1040-200	UC-1053-200	UC-1060-100
Wavelength ¹⁾	1040 nm	1053 nm	1060 nm
Pulse width (FWHM), typical ²⁾	< 200 fs	< 200 fs	< 200 fs
Average output power	> 200 mW		> 100 mW
Pulse repetition rate	63 MHz +/- 1 MHz		
Laser material ³⁾	Ytterbium		Nd:Glass
Power stability, typical	< 1% RMS (12h)		
Beam quality	TEM ₀₀ ; M ² ≤ 1.1		
Polarization	horizontal / vertical (TBD)		
Power supply	100 VAC – 240 VAC, 50/60 Hz, 100W (not including Chiller)		
Laser head size (IC-Laser)	122 x 202 x 96 mm ³ (l x w x h)		
Beam height (IC-Laser ⁴⁾)	76.2 mm (3"), nominal		
Controller size	470 x 200 x 88 mm ³ (l x w x h)		
Chiller	386 x 277 x 203 mm ³ (l x w x h), 100 - 240 VAC, 50/60 Hz, < 625 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) Other wavelengths on request (between 1030nm and 1065nm)

2) Other pulse widths on request (<100fs, <400fs)

3) Different laser materials on request

4) ask for customized system packaging

Main Features

- Passive self-starting modelocking by saturable Bragg reflectors
- High temporal and spatial stability
- Ultra-compact and modular set-up
- Sealed-off technology
- Air-cooled closed-loop chiller (included)
- USB Software remote control
- FEA optimised industrial mirror mounts
- De-rated pump diodes
- High MTBF & up-time

Applications

- Seeding
- THz Generation
- OCT in conjunction with supercontinuum fibre
- ps and fs Spectroscopy
- Non-Linear Optics
- Single Molecule Detection
- Multi-Photon-Microscopy
- THz Imaging
- FLIM

Please Inquire About

- Frequency conversion (SHG, THG, FHG, OPO)
- Higher power
- Application laboratory for sample testing
- Continuum generation / pulse compression
- Air cooled version

