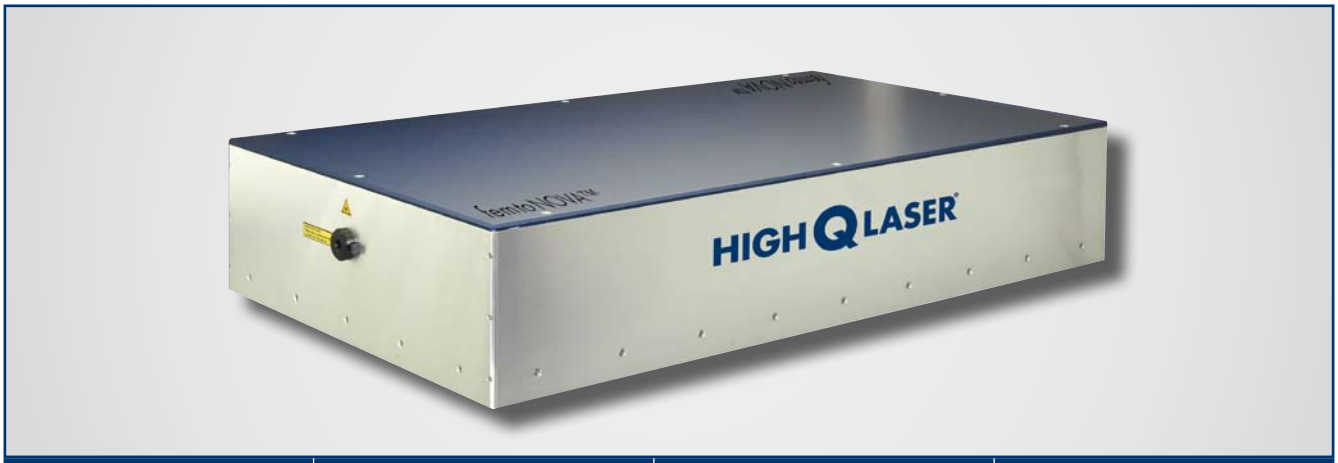
HIGH Q LASER®
THINK ULTRAFAST!™

*femto*NOVA™ & *pico*NOVA™

Cavity-dumped mode-locked laser oscillators



	femtoNOVA™ SC-XXX-60	femtoNOVA™ SC-1040-1000	picoNOVA™ SC-1064-1000
Wavelength[2]	800 - 900 nm	1040 nm +/- 5 nm	1064 nm
Pulse width (FWHM), typical[3]	100 fs	< 400 fs	< 8 ps
Average output power	60 mW	1 W	1 W
Pulse repetition rate	0.5 - 1 MHz	0.5 - 4 MHz	0.5 - 1 MHz
Pulse energy, typ.	> 60 nJ	1 µJ @ 1 MHz	> 1 µJ
Laser material[1]	Ti:Sapphire	Ytterbium	Nd:Vanadate (Nd:YVO_4)
Power stability, typical	< 1 % RMS (12h)		
Beam quality	TEM_{00}; $M^2 \leq 1.2$		
Polarization	horizontal / vertical (TBD)		
Power supply	100, 115, 230 VAC, 50/60 Hz, < 350 W (not incl. chiller)		
Laser head size (IC-Laser)	702 x 502 x 166 mm^3 (l x w x h)		
Beam height (IC-Laser[4])	101.6 mm (4"), nominal		
Controller size	600 x 590 x 550 mm^3 (l x w x h), 19" rack		
Chiller	400 x 200 x 557 mm^3 (l x w x h)		
Operation ambient temp.	15 °C to 32 °C		

All specifications are typical data and subject to change without notice in order to provide the best product possible.
1) different laser materials on request Nd:Glass, Nd:YLF, Nd:YAG, etc.
2) other wavelength on request
3) shorter pulse widths down to 50 fs on longer pulse widths up to 300 ps on request
4) ask for customized system packaging

Main Features

- High pulse energy cavity-dumping module
- Integrated high power *pico***TRAIN**™/*femto***TRAIN**™ oscillator
- User Replaceable Diode Module (URDM) technology
- High temporal and spatial stability
- Compact and modular set-up
- Single phase power supply
- Air cooled closed loop chiller (included)
- Hands-free, true turnkey operation
- Passive self starting modelocking
- USB Software remote control
- Passive self-starting modelocking by saturable Bragg reflectors

Applications

- Seeding
- Non Linear Optics
- Spectroscopy
- Nano Processing
- Micro- / Nano-Machining
- Waveguide Writing
- Tissue Ablation
- Femtosecond Laser Dissection
- Thin Film Ablation
- OPA pumping

Please Inquire About

- Frequency conversion (SHG – THG – FHG)
- Synchronisation "SYNC" option
- Application laboratory for sample testing
- Attenuator
- Continuum generation

CE

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