

## 1030 nm PICOSECOND FIBER OSCILLATOR

GO pico is a mode-locked all-normal-dispersion (ANDi) fiber oscillator with mode-locking obtained by nonlinear polarization rotation. Robust design guarantees excellent stability and maintenance free operation. It makes an excellent choice as a seed source for single amplifiers and whole front-ends of DPSSLs.

### KEY SPECIFICATIONS

- Wavelength 1030 nm
- Output power >30 mW
- Repetition rate 30-100 MHz
- Compact design
- Stable and reliable seed source

### APPLICATIONS

- Biochemical applications
- Spectroscopy
- Seed laser for laser systems used in:
  - drilling and cutting of composites, ceramics, plastics, metals, and alloys
  - surface micro structuring
  - pump source for mid-IR optical parametric amplifiers (OPAs)
  - high harmonics generation
  - LIDT testing

### OPTION FEATURES

- GO femto version ( $\lambda_c=1030$  nm,  $\tau<100$  fs,  $\Delta\lambda=50$  nm,  $f=50$  MHz,  $E_p >4$  nJ)
- GO 2micro version ( $\lambda_c=2072$  nm,  $\Delta\lambda=10$  nm,  $f=22$  MHz,  $E_p >2.7$  nJ)
- Built-in photodiode with SMA connector for external synchronization
- Frequency stabilization



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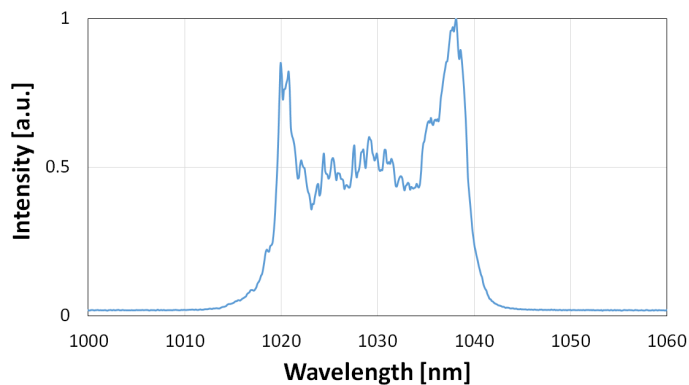


FIG.1 TYPICAL GO PICO SPECTRUM

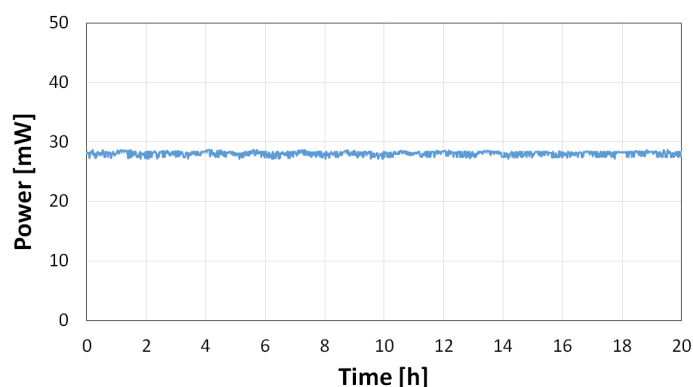


FIG.2 POWER STABILITY  
(<1.3 % RMS OVER 20 HOURS AT AMBIENT TEMPERATURE OF 23°C)

Specification	GOpico
Center wavelength	1030 nm
Average power	>30 mW
Power stability	<1.5 % RMS
Pulse energy	>1 nJ
Bandwidth	>18 nm
Pulse length	<3 ps (sech <sup>2</sup> )
Repetition rate	37 MHz
Output	Fiber-coupled, SC/APC*

\*random, SM nonPM fiber; linear, PM fiber on request

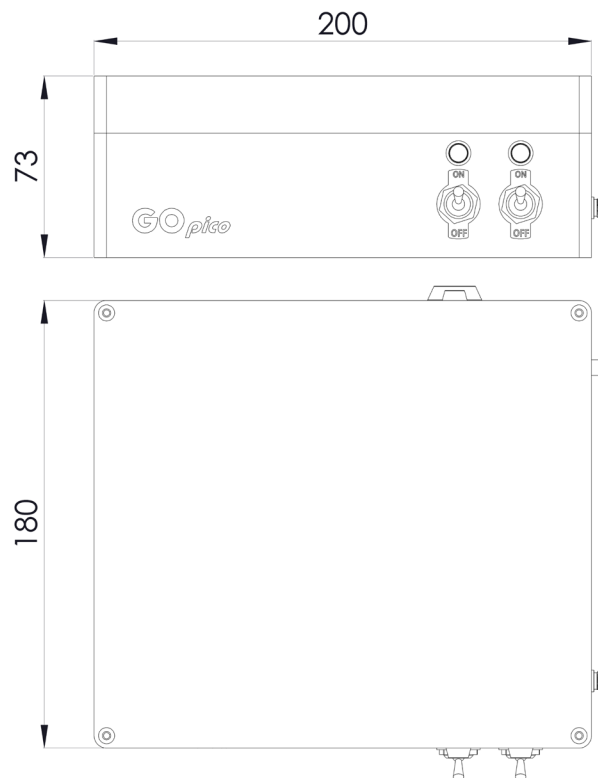


FIG.3 TECHNICAL DRAWING

### Operating requirements

Operating voltage	5 VDC, $\pm 12$ VDC
Power consumption	<36 W
Operating temperature	$23 \pm 3^\circ\text{C}$
Relative humidity	20-60 % (non-condensing)
Laser head size	200x180x73 mm <sup>3</sup>



### ORDERING INFORMATION

solutions@hilase.cz

#### HiLASE Centre

Institute of Physics ASCR, v.v.i.  
Za Radnicí 828, 25241 Dolní Břežany, Czech Republic

Please, send email for pricing information.  
Specifications are subject to change without notice.  
Custom modifications are available upon request.