

## 40 GHz Picosecond Laser

Calmar Optcom has extended its family of picosecond fiber lasers with the addition of two 40 GHz fiber lasers. These ultrafast lasers provide researchers with the ability to test their components at very high speeds.

Pulse repetition rates as high as 160 GHz, and even 640 GHz, can be achieved when Calmar's fiber laser is used with Calmar's Bit Rate Multiplier.

The unique design of Calmar's 40 GHz lasers enable users to tune the wavelength throughout the 1550 nm region, and to vary the pulse repetition rate as necessary.

Calmar's fiber lasers are known for their low timing jitter and low amplitude noise, and both 40 GHz lasers feature the same high performance, thereby ensuring that the quality of the laser output meets even the most stringent test requirements.



- Pulse widths < 1.1 ps
- Repetition rate adjustment 38 – 42 GHz
- Wavelength tunability 1535 – 1565 nm
- Average output power > 20 mW
- Low timing jitter
- Automatic and manual mode-locking
- Easy operation

### Optional Upgrades

- Front panel pulse width adjuster
- Very wide repetition rate range (2 ~ 45GHz)
- Computer control

### Distribution in the UK

**Lambda**  
photometrics

**Lambda Photometrics Ltd**, Lambda House, Batford Mill, Harpenden, Hertfordshire AL5 5BZ

**E:** [info@lambdaphoto.co.uk](mailto:info@lambdaphoto.co.uk) **W:** [www.lambdaphoto.co.uk](http://www.lambdaphoto.co.uk) **T:** +44 (0)1582 764334 **F:** +44 (0)1582 712084

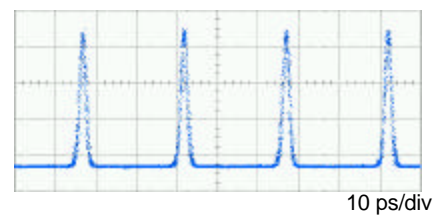
The leading supplier of scientific and industrial lasers, optical systems and associated accessories, fibre optic components and instrumentation, and machine vision products.

### Technical Specifications

Model Number	PSL-40-1T	PSL-40-TT
Pulse Width (ps)	< 1.1	0.8 – 5 adjustable
Output Wavelength (nm)	1535 - 1565	1530 – 1565
Repetition Rate (GHz)	38 - 42	38 - 42
Timing Jitter (fs)	< 70	< 70
Amplitude Noise (%)	1.0	1.0
Output Power (mW)	> 20	> 20
Operating Temp (°C)	15 - 30	15 - 30
Operating Voltage (V)	85 - 264 AC	85 - 264 AC
Dimensions (cm)	48(w) x 42(d) x 9(h)	48(w) x 42(d) x 9(h)

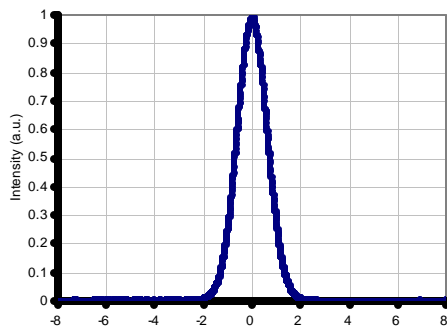
Specifications are subject to change without notice - 06/21/2004

Pulse Train



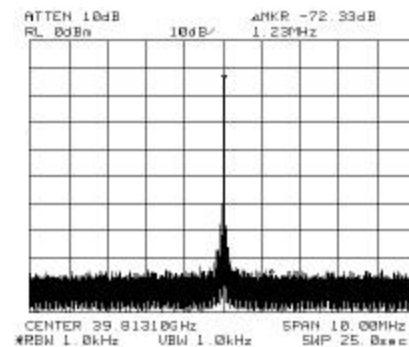
Repetition Rate = 40 GHz

Pulse Width



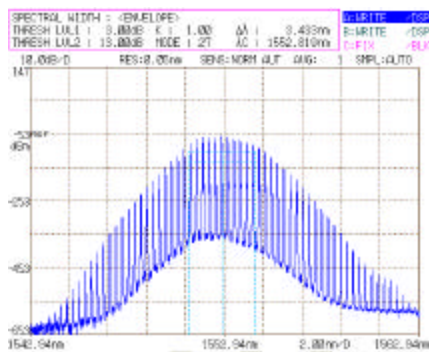
Pulse Width = 0.8ps

Sidemode Suppression



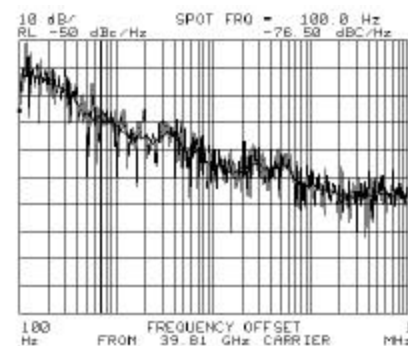
Sidemode Suppression = 72 dB

Spectral Width



Spectral Width = 3.4nm

Timing Jitter



RMS Timing Jitter = 63 fs