

## 40 GHz Fiber 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.

Each laser is equipped with sophisticated software that makes configuration and operation quick and simple.



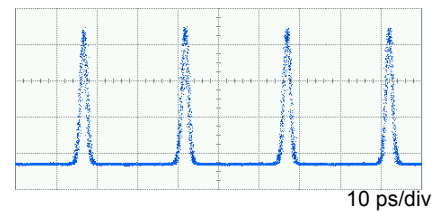
- Pulse widths < 2 ps
- Repetition rates 39 - 41 GHz
- Repetition rates up to 640 GHz possible using Bit Rate Multiplier
- Timing jitter < 100 fs
- Amplitude noise ~ 1.5 %
- Tunable wavelength 1530 - 1560 nm
- Average output power > 20 mW
- Manual and automatic mode-locking
- Easy configuration and operation
- Long term stability

### Technical Specifications

Model Number	PSL-40-1	PSL-40-2
Pulse width (ps)	< 1.0	< 2.0
Wavelength (nm)	1540 - 1560	1530 - 1560
Repetition Rate (GHz)	36 - 41	36 - 41
Output Power (mW)	> 15	> 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)

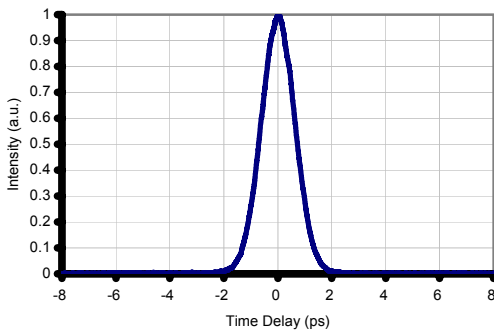
Specifications are subject to change without notice - 3/2003

### Pulse Train



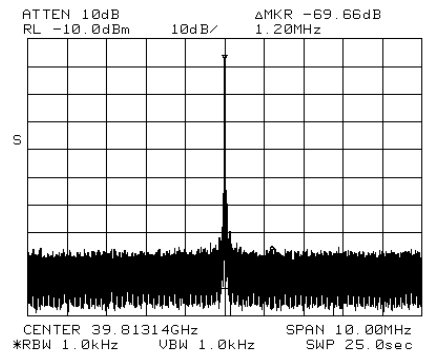
Repetition Rate = 40 GHz

### Pulse Width



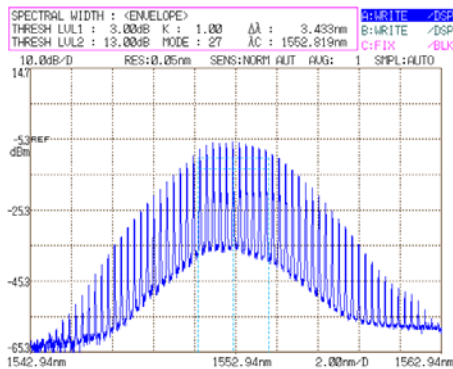
Pulse Width = 0.8ps

### Sidemode Suppression



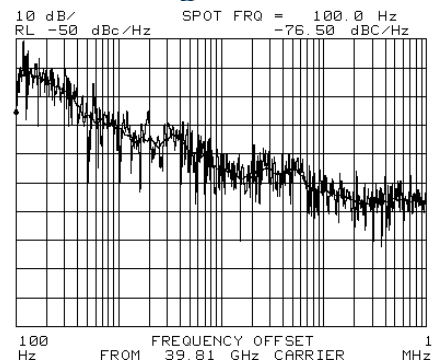
Sidemode Suppression > 65dB

### Spectral Width



Spectral Width = 3.4nm

### Timing Jitter



RMS Timing Jitter = 63 fs