

Firefly-THz

High Brightness, Narrow Linewidth
Pulsed, Tunable Terahertz Laser Source



Applications

- THz spectroscopy
- Non-destructive testing (NDT)
- The remote detection, analysis and imaging of drugs, explosives and other threat agents
- Bio-medical diagnostics

Features

- Widely tunable, narrow linewidth output enables broad, fast THz wavelength scans from a single unit
- High brightness provides greater sensitivity and standoff distance for remote sensing/spectroscopy
- Automated, hands-free operation & wavelength tuning for increased productivity
- Pulsed nanosecond output removes the need for post-detection Fourier transform data processing
- Unique Instrument Control by Ethernet (ICE)
- Unique Invariant™ alignment-free mounts
- Laptop computer, software UI and compact laser controller supplied as standard (not shown)

Specifications ^{[1][5]}

Output Pulse Energy	> 9nJ at 50 Hz
Tuning Range^[2]	0.8 to >2.5 THz
Pulse Repetition Rate^[3]	50 Hz (fixed)
Pulse Duration	<30ns (FWHM)
Linewidth^[4]	<50GHz (typical)
Beam Quality	Near diffraction-limited

Notes:

1. All specifications at 50Hz pulse repetition rate and at the peak of the tuning curve unless stated otherwise.
2. Other wavelength ranges available - please inquire.
3. Other custom repetition rates available - please inquire.
4. Optional line-narrowed option available - please inquire.
5. System does not include THz detection method. M Squared can advise - please inquire.

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M Squared Laser's laser products are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Centre of Devices and Radiological Health on all systems ordered for shipment after October 1st, 2003.

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