



It's Our Business To Be Exact!



The new 621B-MIR Laser Wavelength Meter from Bristol Instruments provides real-time wavelength information for scientists and engineers who use lasers that operate in the mid-infrared. The result is more meaningful experimental results when using sources such as tunable quantum cascade lasers.

The model 621B-MIR uses proven Michelson interferometer-based technology to measure absolute laser wavelength to an accuracy of ± 1 part per million. Continuous calibration with a built-in wavelength standard guarantees the reliable accuracy that is required for the most demanding applications, and expected from Bristol Instruments.

FEATURES

Absolute wavelength accuracy of ± 1 part per million.

Built-in wavelength standard for continuous calibration.

Operates from 4.0 to 11.0 μm .

Easy to integrate into experiment for automatic wavelength reporting and control.

Straightforward operation with PC using high-speed USB interface.

Includes software for custom or LabVIEW programming.

621B-MIR LASER WAVELENGTH METER

The only real-time laser wavelength measurement in the MID-INFRARED.

SPECIFICATIONS

LASER TYPE (1)	CW		
WAVELENGTH			
Range	4.0 - 11.0 μm		
Absolute Accuracy	± 1.0 part per million ± 0.006 nm @ 6250 nm ± 0.002 cm^{-1} @ 1600 cm^{-1} ± 0.05 GHz @ 48,000 GHz		
Repeatability (2)	± 0.2 part per million		
Calibration	Continuous with built-in standard HeNe laser		
Display Resolution	8 digits		
Units	nm or cm^{-1} (vacuum or standard air), GHz		
OPTICAL INPUT SIGNAL			
Maximum Laser Bandwidth (3)	10 GHz 1.3 nm at 6250 nm 0.3 cm^{-1}		
Minimum Input (4)	0.4 mW (4 μm)	0.3 mW (7.5 μm)	0.5 mW (11 μm)
Maximum Input	10 - 15 times minimum input level		
MEASUREMENT RATE	2 Hz		
OPTICAL INPUT	Collimated beam, 3 mm diameter aperture Visible tracer beam exits aperture to facilitate alignment		
COMPUTER REQUIREMENTS	PC running Windows Vista or XP with 1 GHz or higher microprocessor, at least 128 MB of RAM, USB 1.1/2.0 port, VGA monitor, mouse or other pointing device		
INSTRUMENT INTERFACE	High-speed USB 2.0 interface Windows-based display program Library of commands for custom/LabVIEW programming		
DIMENSIONS (W x H x L) AND WEIGHT	6.5" x 7.5" x 15.0" (165 mm x 191 mm x 381 mm) 14 lbs (6.4 kg)		
POWER REQUIREMENTS	90 to 260 VAC, 50/60 Hz		

- (1) System will operate with pulsed lasers operating at repetition rates greater than 10 MHz.
- (2) Standard deviation for a 5 minute measurement period after the instrument has reached thermal equilibrium.
- (3) Bandwidth is FWHM. When bandwidth is greater, wavelength is automatically reported with reduced accuracy.
- (4) Sensitivity at other wavelengths can be determined from a graph that is available upon request.



Call: (585) 924-2620 for more information or visit our website at : www.bristol-inst.com