



Mini-Benchtop Stabilized Laser

High-Power, Wavelength Stabilized

Coherent Mini-Benchtop Lasers are ultra-compact, rugged and easy-to-use solutions. Incorporating a Coherent SureLock™ laser diode, the Mini-Benchtop Laser delivers steady, high-power, spectrum-narrowed performance with low power consumption. All SureLock™ Series lasers are stabilized by the Coherent PowerLocker® Volume Holographic Grating (VHG), ensuring precise, ultra-stable center wavelengths, low temperature dependence, and consistent optical performance over the locked region.

With easy-to-adjust manual power controls, a connectorized fiber output and a touchscreen interface, the Mini-Benchtop Laser provides better than 1% power stability and <1-minute warm-up. Delivering extreme temperature insensitivity, these lasers are perfect for the lab or OEM Raman spectroscopy user.

Comes with an FC/PC front panel connector. An optional 105 μm fiber cable with either FC/PC or SMA end connector is also available.



FEATURES & BENEFITS

- Narrow spectral linewidth – 0.07 nm FWHM nominal
- High powers - from 150 mW to <500 mW
- SMSR >40 dB
- Integrated drive electronics and temperature control
- Manually adjustable digital power control with LCD Touchscreen display
- Plug-and-play with integrated e-stop and keyswitch
- Connectorized FC/PC fiber coupled output
- Optional 105 μm MM fiber, 0.22 NA, with FC/PC or SMA end connector

APPLICATIONS

- Raman Spectroscopy
- Metrology
- Bio-instrumentation
- Sensing
- Analytical Instrumentation

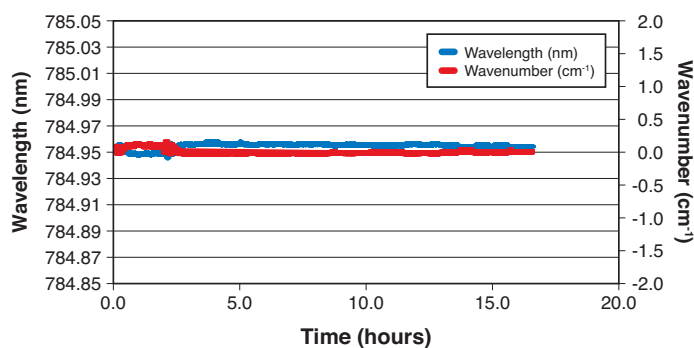


| SPECIFICATIONS | BT-785 | BT-830 | BT-976 | BT-1064 |
|---|--|-----------|-----------|-----------|
| Center Wavelength (nm) (vacuum) | 785 | 830 | 976 | 1064 |
| Center Wavelength Tolerance (nm) | ±1 | ±1 | ±1 | ±1 |
| Output Power (mW) | 350/<500 | 350/<500 | 350/<500 | 350/<500 |
| Spectral Width (nm) | | | | |
| Typical | 0.07 | 0.07 | 0.07 | 0.07 |
| Maximum | 0.15 | 0.15 | 0.15 | 0.15 |
| Side Mode Suppression Ratio (dB) | 40 | 40 | 40 | 40 |
| Connector ¹ | FC/PC | FC/PC | FC/PC | FC/PC |
| Numerical Aperture (NA) | 0.22 | 0.22 | 0.22 | 0.22 |
| Ambient Temperature | | | | |
| Operating Condition ² (°C) | 10 to 35 | 10 to 35 | 10 to 35 | 10 to 35 |
| Non-operating Condition ² (°C) | -10 to 60 | -10 to 60 | -10 to 60 | -10 to 60 |
| UTILITY AND ENVIRONMENTAL REQUIREMENTS | | | | |
| Current (A) | 1 | | | |
| Input Voltage (VAC) | 90 to 240/50 to 60 Hz | | | |
| Fiber Type | 105 μm core/ 900 μm tubing | | | |
| Dimensions (L x W x H) | | | | |
| Laser | 150 x 105 x 50 mm (5.91 x 4.13 x 1.97 in.) | | | |
| Weight | | | | |
| Laser | 1 kg (2.2 lbs) | | | |
| MODEL NUMBERS | | | | |
| BT-λλλ-PLR-Power-FC/PC | | | | |
| BT-λλλ-PLR-Power-SMA (includes FC/PC-SMA Adapter Cable) | | | | |

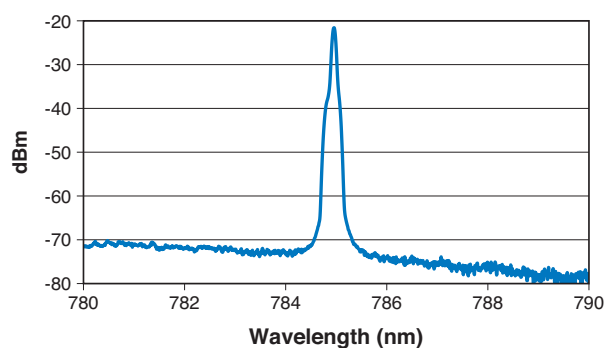
¹ FC/PC to SMA adapter cable available - please specify at time of ordering.
² Non-condensing.

TYPICAL PERFORMANCE DATA

Wavelength Stability



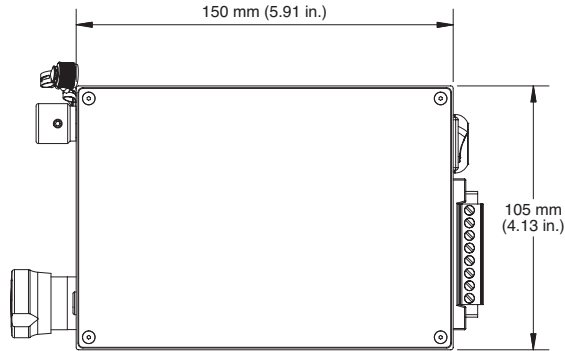
Optical Spectrum (sample)



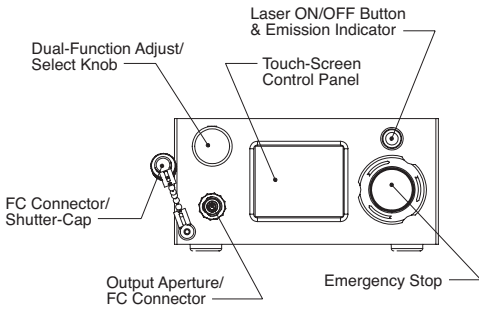
MECHANICAL SPECIFICATIONS

Mini-Benchtop Laser

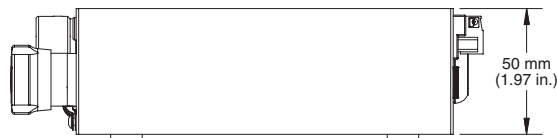
Top View



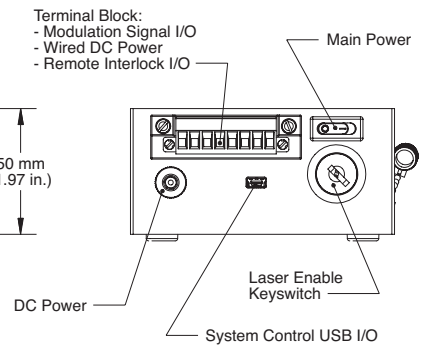
Front View



Side View



Rear View



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Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice. Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all Mini-Benchtop Lasers. For full details of this warranty coverage, please refer to the Service section at www.coherent.com or contact your local Sales or Service Representative. MC-007-20-0M-0120 Copyright ©2020 Coherent, Inc.

