chilas

ATLAS 850

ULTRA-NARROW LINEWIDTH
WAVELENGTH TUNABLE LASER SOURCE

DATASHEET



ATLAS 850

ULTRA-NARROW LINEWIDTH WAVELENGTH TUNABLE LASER SOURCE



Wide tunability + NIR wavelength tunability

Fiber connected

Applications

- Sensing
- Metrology
- Spectroscopy

Key Features

- NIR wavelength tunability
- Narrow linewidth
- Excellent SMSR
- Fully integrated with no moving parts, enabling switching between wavelengths instantly
- Excellent repeatability
- Software based wavelength calibration
- Easy to set-up and use
- Compact size

Laser Description

Chilas ATLAS uses state-of-the-art Photonics Integrated Circuit technology. The ATLAS module comprises a butterfly packaged laser and corresponding electronic controllers. The laser is a diode amplifier coupled to a silicon nitride waveguide circuit as a tunable external cavity. For tuning and control, drivers for laser current, temperature and heaters are all built into this compact module. The laser is calibrated for the specified wavelength range and delivered with a software graphical user interface (GUI). Additionally, a Python library can be provided.

Performance and specifications

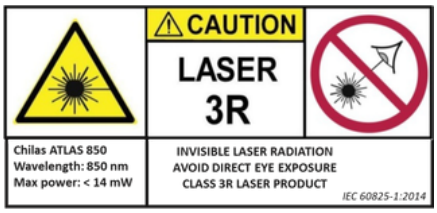
OPTICAL

Parameter	Specified values
Center wavelength	850 nm ± 15 nm
Wavelength range	30 nm
Wavelength resolution	3 pm
Wavelength accuracy	± 10 pm
Wavelength switching time	20 ms
Fiber output power at center wavelength	≥ 1 mW
Intrinsic linewidth	≤ 50 kHz
Side-mode suppression ratio	≥ 40 dB
Modulation bandwidth of diode current:	500 kHz

PACKAGING

Parameter	Specified values
Dimensions (L x W x H)	100*60*20 mm
Weight	167 g
Operating temperature	15 – 50 °C
Power supply voltage	5 V_{DC}
Power supply current	3.8 A
Interface connector	DE-9
Modulation/RF connecter	SMB
Fiber type and connector	PM FC/APC

Laser Safety Information



This laser product complies with FDA performance standards 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.

Product pictures



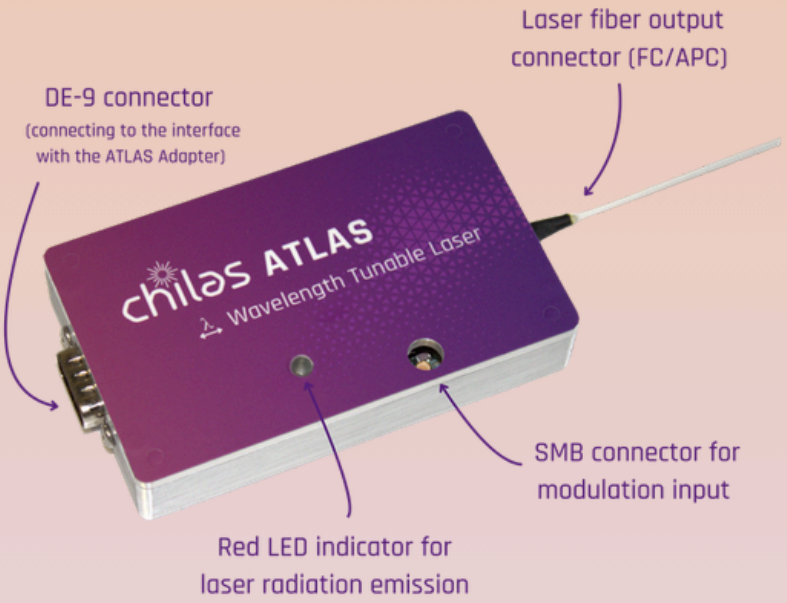
ATLAS with adapter for USB and power connection



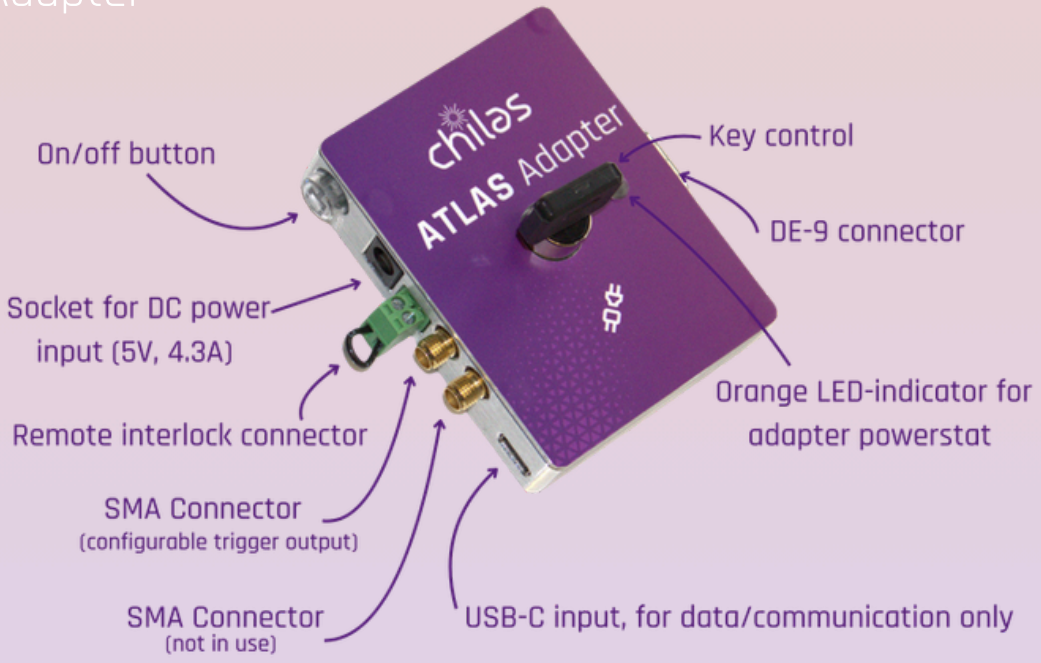
ATLAS in hand

Components overview

ATLAS Laser



ATLAS Adapter



Chilas Lasers, Tuned to your Wavelength

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