chilas

ATLAS 1310 (O-band)

ULTRA-NARROW LINEWIDTH
WAVELENGTH TUNABLE LASER SOURCE

DATASHEET

ATLAS 1310

ULTRA-NARROW LINEWIDTH WAVELENGTH TUNABLE LASER SOURCE



≤ 10 kHz linewidth **100 nm tuning range** **Fiber connected**

Applications

- Data centers
- Devices under testing
- Optical communications
- LiDAR
- Molecular Analysis Systems
- Sensing

Key Features

- Wide wavelength tunability in O-band
- Ultra-narrow linewidth
- Low RIN
- Excellent SMSR
- Fully integrated with no moving parts, enabling switching between wavelengths instantly
- Excellent repeatability
- Wavelength control via software including GUI
- 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. For intuitive operation and control, we provide a software interface which includes a graphical user interface (GUI) for straightforward wavelength setting and tuning, along with a Python library for advanced laser control functions.

Performance and specifications

OPTICAL

Parameter	Specified values
Wavelength range	100 nm
Wavelength resolution	10 pm
Wavelength accuracy	± 10 pm
Wavelength switching time	20 ms
Fiber output power at central wavelength	≥ 13 dBm / 20 mW
Intrinsic linewidth	≤ 10 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 VDC
Power supply current	3.8 A
Interface connector	DE-9 or USB male
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



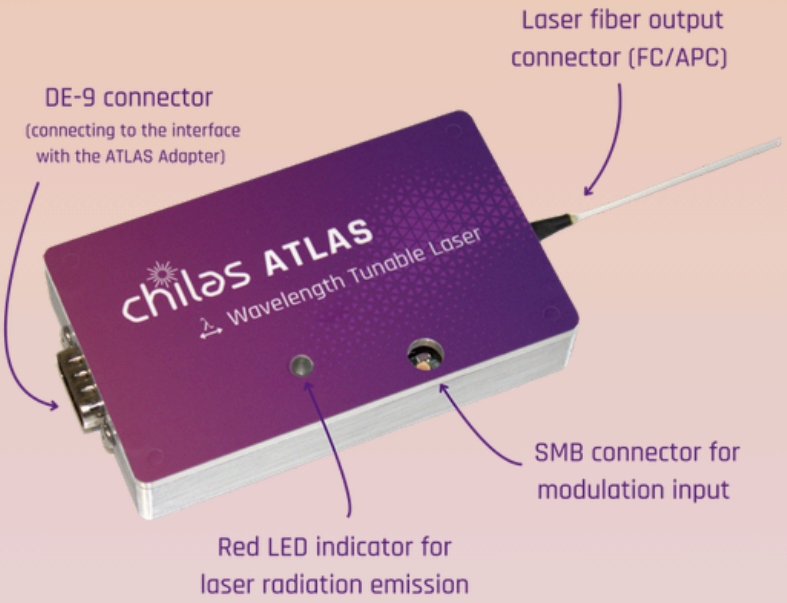
ATLAS comes with adapter for USB and power connection



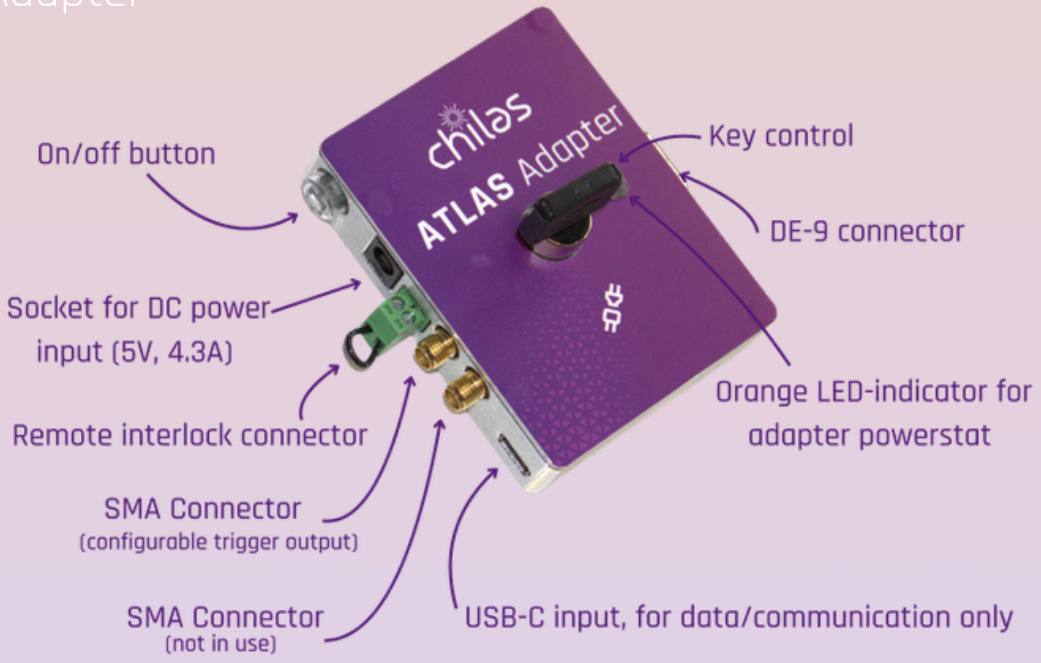
ATLAS in hand

Components overview

ATLAS Laser



ATLAS Adapter



Chilas Lasers, Tuned to your Wavelength

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