



AZUR LIGHT SYSTEMS

"A NEW GENERATION OF FIBER LASERS"

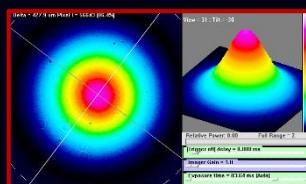
ALS-IR
976 - 1030 - 1064 nm
Up to 50W

PRACTICAL

- ✓ Fiber based architecture
- ✓ "Coolerless" laser head
- ✓ Maintenance free - long life
- ✓ Compact design - OEM version available
- ✓ Low power consumption

TECHNICAL

- ✓ CW emission - TEM00 mode
- ✓ Single frequency version
- ✓ Ultra-low noise
- ✓ Excellent pointing and power stability
- ✓ High polarization ratio and stability



APPLICATIONS

- ✓ Atom trapping and laser cooling
- ✓ Spectroscopy IR
- ✓ High power Oscillator or Amplifier pumping
- ✓ Non linear generation in the visible
- ✓ Industrial control and measurement

SPECIFICATIONS

	Specifications		Unit
Wavelengths ⁽¹⁾	976	1030 or 1064	nm
Output power	5, 10, ...	5, 10, ..., 50	W
Beam quality	M2 < 1.1		-
Spatial mode	TEM00		-
Spectral width - single frequency ⁽²⁾ - narrow bandwidth	< 50 kHz < 50 pm		-
Power stability	< ± 0.2 % (short term) < ± 0.3 % (over 8 hours)		-
Noise [100Hz - 10MHz] RMS: - single frequency - narrow bandwidth	< 0.05 % < 0.2 %		-
Frequency stability ⁽³⁾	< 0.1	pm	
Output polarisation	Polarised > 99:1		-
Pointing stability	< ± 0.5	µrad/°C	
Output	PM980 / HI1060 / LMA / Collimated fiber / laser head		-
Laser control	Potentiometer, Touch screen, Analog IN, USB		-
Supply requirements	90-240V/50-60Hz		-
Electrical power consumption	200<...<500	W	
Cooling	Air cooled		-
Dimensions: ⁽⁴⁾ - Laser rack	480*460*130	mm	

(1): Other wavelengths available on request.

(2): Linewidth reduction down to 3kHz available as an option with an external seeder rack.

(3): For single frequency version only. Measured over 8 hours and temperature variation < 3°C.

(4): Standard dimensions. Others dimensions available for OEM.

Azur Light Systems (ALS) develops, manufactures and commercialises fiber laser technology at new wavelengths for scientific, industrial and bio-medical applications. Representing a veritable breakthrough in the laser market, and offering many advantages in terms of stability, robustness and ease of integration, this innovative technology offers significant performance advantages over other solid state laser technologies.

Our **single frequency infrared lasers** offer unique performance in terms of low noise and high power, combined with the inherent efficiency and stability of fiber lasers. **With a RIN of less than -120 dBc/Hz (100Hz – 10 MHz) at 50W output power**, ALS infrared lasers are perfectly suited for many applications requiring very low noise sources such as metrology, optical trapping, cooling of atoms or optical pumping.

