SINGLE FREQUENCY

Single-frequency near-infrared fibre lasers

Integrated seed-and-amplifier systems for narrow-linewidth near-infrared experiments.

Applications to discuss: Atomic spectroscopy; Interferometry; Quantum-optics experiments.

Selection points
920-1900 nm selected bands / <50 kHz listed linewidth / Power limits vary by wavelength

Configuration options

Wavelength option	Output power	Emission linewidth
920-930 nm	≤6 W	<50 kHz
977 nm	≤4 W	<50 kHz
1018-1100 nm	≤30 W	<50 kHz
1535-1580 nm	≤8 W	<50 kHz
1730-1900 nm	≤10 W	<50 kHz

Each row is a separate configuration. Limits from different rows must not be combined.

Technical details

Parameter	Specification or condition
Polarization extinction ratio	>20 dB
Beam propagation factor	M^2 <1.1
Polarization	Linear

Integration and delivery

Item	Configuration detail
Format	Air-cooled 2U, 19-inch rack enclosure
Controls	Constant-current or constant-power operation; power and temperature monitoring
Output	Polarized fibre output; confirm connector and isolation

Conditions and configuration notes

- Each wavelength band has its own power limit; the 30 W limit applies only to the 1018-1100 nm configuration.
- The linewidth measurement time and test method are not stated in the specification table.