

Sumo



New generation of tunable narrow-linewidth single-frequency laser modules

- Stable single-frequency operation
- Ultra-narrow linewidth
- Large wavelength tuning range
- Internal optical isolaton stage
- High repeatability and 24/7 operation
- Compact, dust-sealed OEM package
- Low acoustic noise pickup
- Plug & play
- Passively air cooled – no water cooling
- Low power consumption
- One-button operation – no adjustment knobs or screws
- Maintenance free – no user-serviceable parts inside or outside laser



	Sumo – 10	Sumo – 15
Center wavelength	1036 – 1046 nm	1540 – 1560 nm
Output power	> 15 mW	> 20 mW
Linewidth ¹	< 10 kHz ($3 \cdot 10^{-7} \text{ cm}^{-1}$)	
Side-mode suppression	> 60 dB	
Output	Panda PM fiber	
PER	> 20 dB	
Fast tuning range	10 GHz	
Fast tuning speed	10 kHz	
Coarse tuning speed	1 nm/s	
Wavelength stability	7 pm rms, 40 pm pk-pk (40h)	
Amplitude noise	< 0.5% rms (1h)	
Operating temperature	15 – 35 °C	
Storage temperature	-15 – 65 °Cs	
Size laser head	200 x 200 x 250 mm ³	
Size control unit	425 x 352 x 134 mm ³ (19" rack mount)	
Power consumption	< 50 W	
Power supply	90 – 264 VAC, 47 – 63 Hz	
Weight laser head	2.5 kg	
Weight controller	7 kg	
Measurement time	< 120 μs	

Options

- Locking to ITU grid
- Wider tuning range
- Mode-hop free tuning over entire tuning range
- Simple low-cost version with reduced tuning range ($\pm 10 \text{ GHz}$)

Sample data Sumo – 15

