

Tunable Laser Source – Benchtop

TLS-APB Series



Mode-hop-free Tuning

High performance external cavity tunable lasers combining:

- Narrow linewidth
- Wide tuning range
- High output power
- High signal-to-noise ratio

Tunable Laser Source – OEM

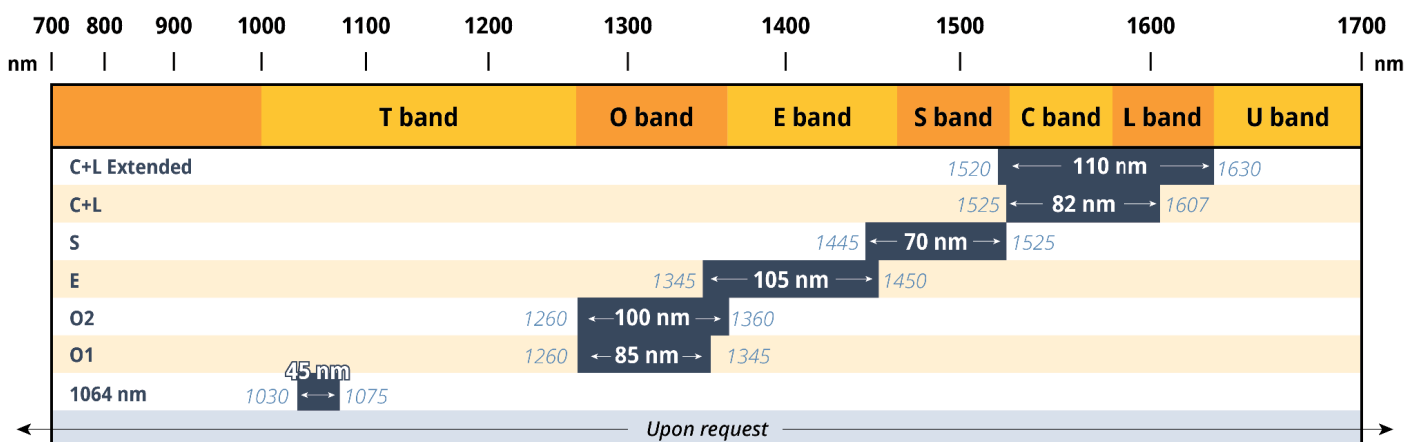
TLS-AP Series

Designed for Easy Integration

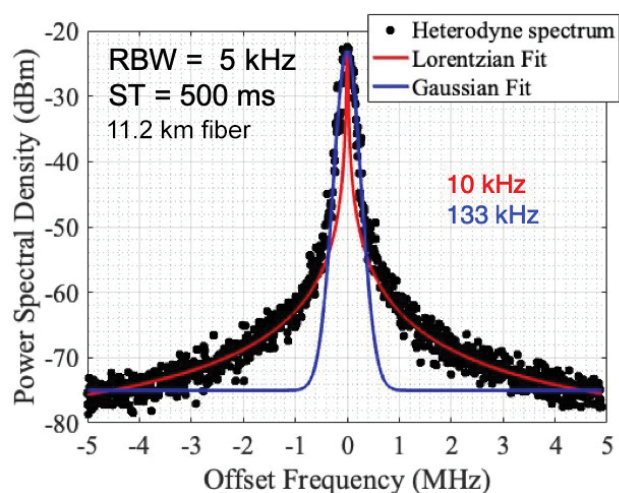
Efficient interfacing and allows customization, for maximum flexibility.



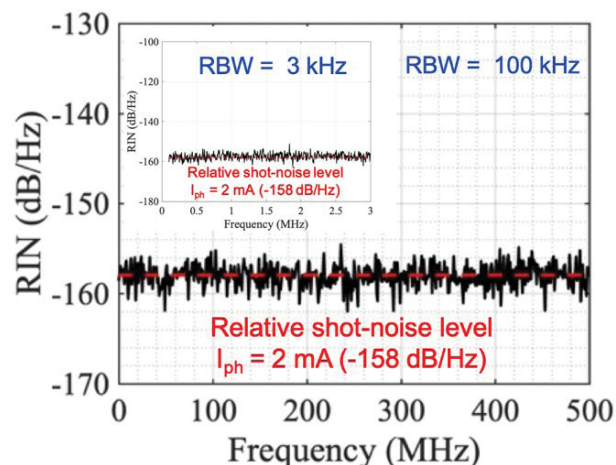
Available Tunable Laser Sources



Narrow Intrinsic Linewidth Tunable Lasers



Shot-noise Limited Operation



Model Specifications

Models	Wavelength Range (nm)	Power Range (dBm)	Peak Output Power (dBm)	Max Power Full Span (dBm)
TLS-AP(B)-T	1030 – 1075	0 to 13	13	8
TLS-AP(B)-O1	1260 – 1345	0 to 13	13	9
TLS-AP(B)-O2	1260 – 1360	0 to 13	13	9
TLS-AP(B)-E	1345 – 1450	0 to 10	10	8
TLS-AP(B)-S	1445 – 1525	0 to 10	10	8
TLS-AP(B)-CL1	1525 – 1607	0 to 10	10	7
TLS-AP(B)-CL2	1520 – 1630	0 to 10	10	7

Common Specifications

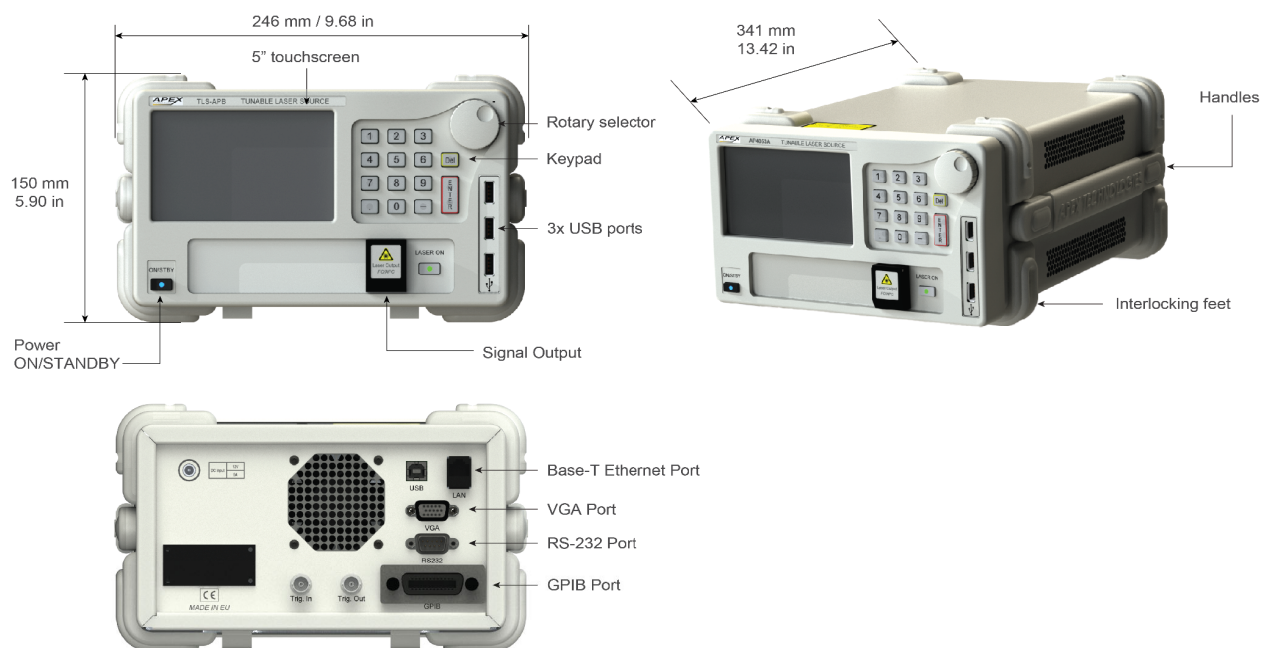
Parameters	Values
Wavelength Setting Resolution	3 pm
Wavelength Stability	+/- 1 pm
Absolute Wavelength Accuracy	+/- 2 pm
Wavelength Repeatability	+/- 2 pm
Power Flatness (Static/Sweep Modes)	0.05 dB
Sweep Speed	Adjustable from 5 to 200 nm/s
Power Stability @24h	+/- 0.2 dB
Power Repeatability (step mode)	+/- 0.05 dB
Dynamic Power Repeatability (Sweep mode @10 nm/s)	+/- 0.01 dBm
Dynamic Power Repeatability (Sweep mode @100 nm/s)	+/- 0.06 dBm
RIN (I _{ph} =2mA)	-158 dB/Hz
Lorentzian Linewidth (Fundamental)	10 kHz
Linewidth (Integration over 500 ms)	133 kHz
SMSR	55 dB/0.8 pm
Signal-to-Total-Source-Spontaneous-Emission Ratio	55 dB/100 pm
Mode of Operation	Static, sweep and step modes

General Specifications

Parameters	Values
Optical Connectors	FC/APC (other connectors available under request)
USB Connectors	3x USB-A 2.0 ports (enables keyboard, mouse and USB stick)
Remote Control	Ethernet, GPIB (optional)
RS-232	Yes
Trigger Output	Send trigger each FSR (around 1 GHz)
Internal Memory	64 GB
File Formats	TXT, BMP and setup file formats
Power Requirement	Furnished AC Adaptor with 12V/5A DC output, power 60W
Operating Temperature	+5 to 35 °C
Storage Temperature	-10 – +50 °C
Humidity	20 – 80% RH non-condensing
Weight	Average: 4.5 kg / 9.92 lb

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