



SLIM LINER



THE NARROWEST-LINEWIDTH LASER

The SLIM LINER, a high spectral purity laser source, is a single-frequency, ultra-narrow linewidth laser. It is based on the Self-Narrowing Photonic Oscillator (SNPO) technology developed by the Institut Foton at Université de Rennes in France. A pump laser is locked onto a cavity using stimulated Brillouin scattering, which offers an extremely narrow gain bandwidth, naturally favoring a high spectral purity.

SPECIFICATIONS

- Laser emission: continuous wave (CW)
- Available wavelengths: 1529 to 1562 nm (customizable)
- Output power: typ. 10 mW (customizable)
- Integrated linewidth over 1 sec: 500 Hz
- Frequency noise floor : typ. $0.0004 \text{ Hz}^2/\text{Hz}$
- Intrinsic linewidth*: 1.5 mHz
- Polarization Extinction Ratio (PER): typ. > 20 dB
- RIN: typ. < -150 dBc/Hz at 1 MHz
- Optical output connector: FC/APC with narrow key
- NTC resistance reading connector: SMA
- Temperature control input connector: SMA
- Power supply plug: P1J
- Product dimensions: $360 \times 360 \times 88 \text{ mm}^3$
- Product weight: 9 kg

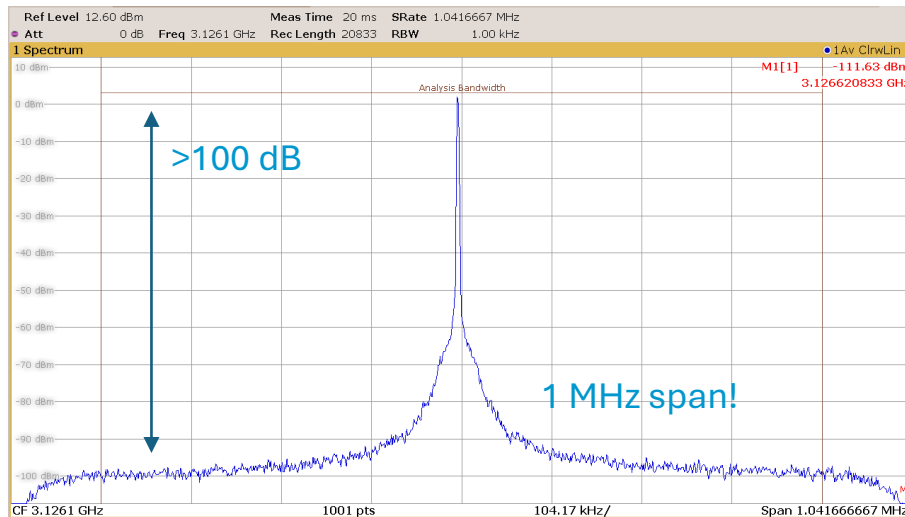
*This value corresponds to π *white frequency noise, but it does not always have a physical meaning. Read more in our [white paper](#).



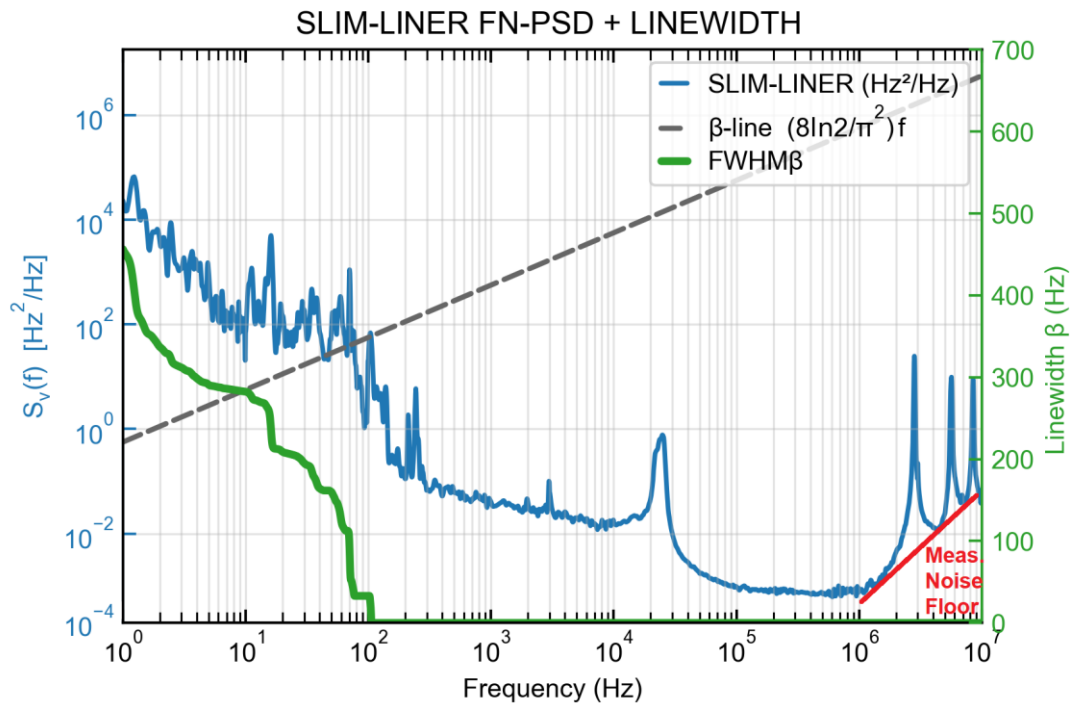
PRODUCTS



PERFORMANCES



Optical Power Spectrum on a Span of 1 MHz



Frequency Noise Measurement of the SLIM LINER

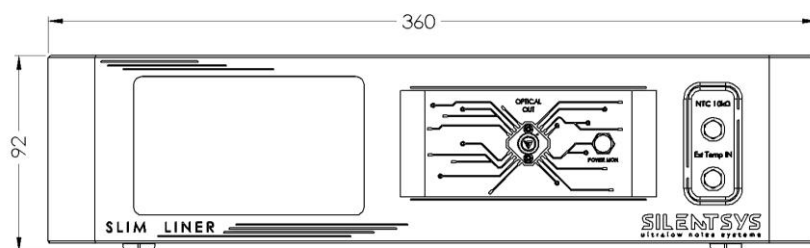


PRODUCTS

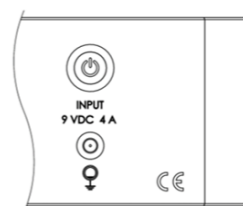


DRAWINGS

The dimensions of the device are presented here with a simplified view. It also shows the connections from the front and back view of the instrument.



FRONT



BACK (CROPPED)

Dimensions are in [mm]

FUNCTIONAL DIAGRAM

The functional diagram is a simple view of what the instrument does. It enables a fast and simple understanding of the internal functionalities in respect to the system inputs and outputs.

