



OPTICAL FREQUENCY DISCRIMINATOR

Ultralow frequency noise
Compact & TurnKey
UV-VIS-NIR-MIR

1 to 2 channels





OFD



OPTICAL FREQUENCY DISCRIMINATOR

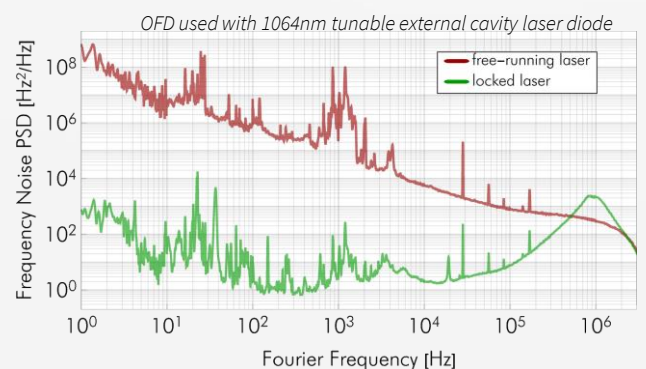
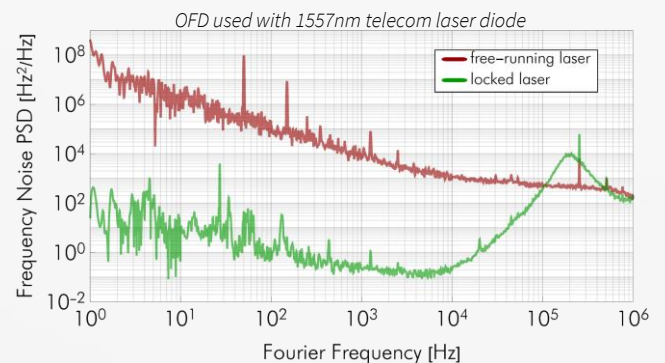
The OFD system smartly delivers a voltage signal that is proportional to the frequency fluctuations of the input laser beam. This turn-key module is suitable for laser frequency noise characterization and/or for laser frequency stabilization to drastically reduce its optical full width at half maximum linewidth. The OFD features ultralow noise performances being successful in achieving frequency noise levels as low as $0.1 \text{ Hz}^2/\text{Hz}$; and this in a compact and user-friendly package.

SPECIFICATIONS

- Laser type: single-frequency continuous wave
- Optical power in: $\sim 200 \mu\text{W}$ before saturation
- Optical Input: typ. FC/APC connexion
- Electrical output voltage range: $\pm 5\text{V}$ max
- Electrical output connector: SMA female
- Free Spectral Range (FSR): typ. 1 MHz to 1 GHz
- System sensitivity: typ. 1 MHz/V to 1 GHz/V
- Frequency noise floor limit: typ. $< 0.1 \text{ Hz}^2/\text{Hz}$
- Typical laser linewidth achievable: up to Hz-level
- Systems dimensions: $360 \times 360 \times 88 \text{ mm}^3$
- External control of the Optical module temperature

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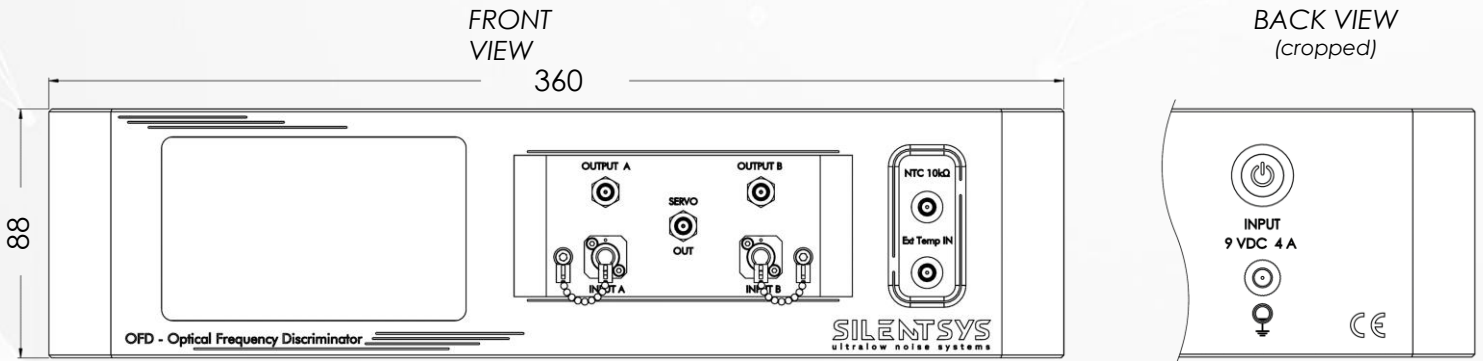
PERFORMANCES



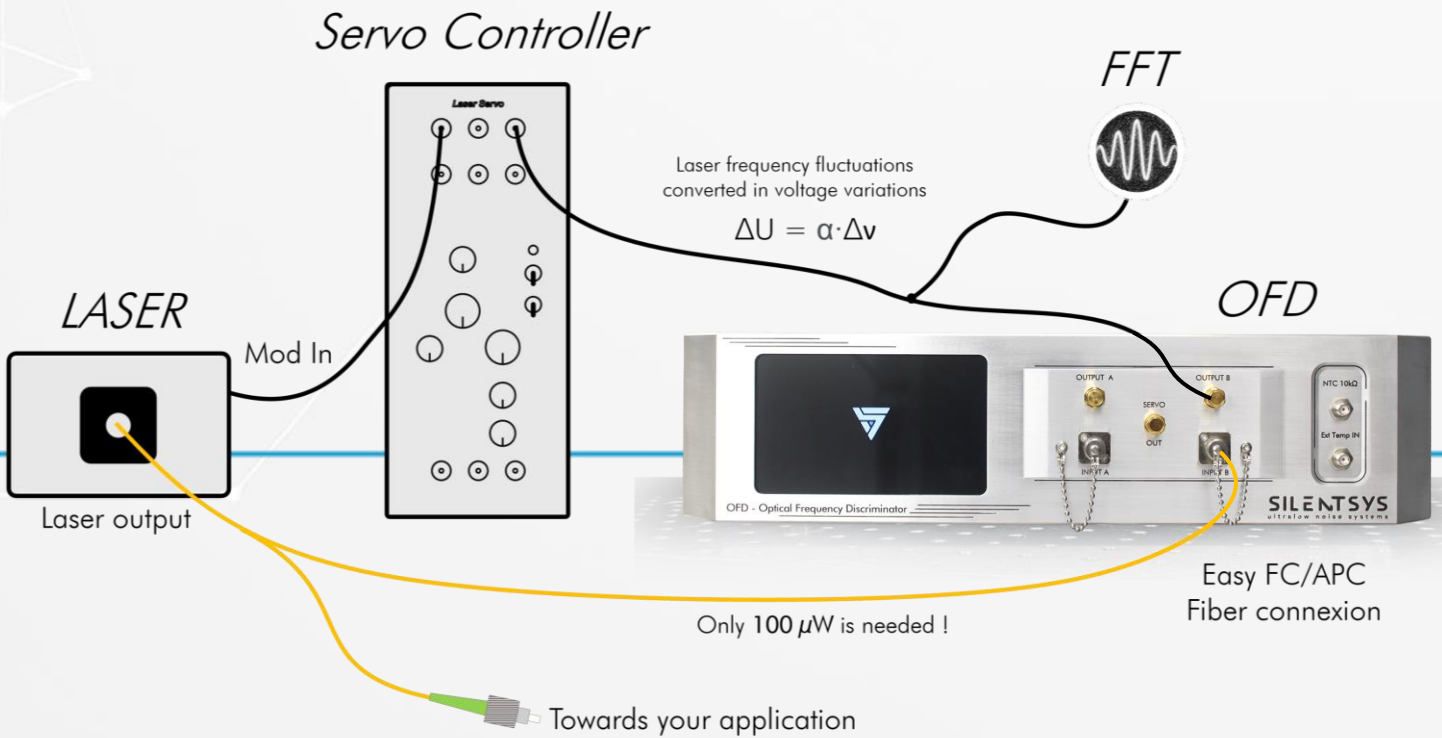
Coming soon : PID controller included !



DRAWINGS



HOW-TO-USE



ENHANCE YOUR LASER
WITH SIMPLICITY !