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# MENHIR-1030 SERIES - 160 MHz

The MENHIR-1030 SERIES is the first industrial-grade laser of its kind that operates at 1030 nm and achieves the lowest phase noise and timing jitter on the market. The laser is passively air-cooled and fully self-contained, featuring extreme robustness and reliability. In this document, we report the full characterization of the product operating at a repetition rate of 160 MHz.



## Key product specifications

- f<sub>rep</sub>: 80 200 MHz
- Power: > 100 mW
- λ<sub>0</sub>: 1025 1035 nm
- Clean soliton pulse
- Bandwidth: > 5 nm
- Pulse width: < 300 fs</li>
  (Transform limited)
- Sech<sup>2</sup>-shaped spectrum
- Beam characteristics: TEM<sub>00</sub>, M<sup>2</sup> < 1.10</li>
- Dimensions: (L x W x H)
  250 x 260 x 60 mm<sup>3</sup>





#### Beam characteristics



## Power stability

The MENHIR-1030 SERIES demonstrates high long-term power stability and is shot noise-limited above 1 MHz.



# Repetition rate stability

The MENHIR-1030 SERIES features extreme repetition rate stability and ultra-low pulse-to-pulse jitter. The freerunning phase noise of a MENHIR-1030 at 160 MHz is reported here. The phase noise is measured on the 62<sup>th</sup> harmonic, *i.e.*, at 10 GHz.



The data represents an example of a MENHIR-1030 at 160 MHz. Please inquire for custom modifications.