

Onefive GENKI HP

Cost-effective picosecond laser with integrated pulse picker

- Pedestal-free pulses
- Low amplitude noise
- Pulse picker
- Burst-mode
- Remote control
- Maintenance-free 24/7 operation



The GENKI HP is an industrial-grade, cost-effective, high power, picosecond laser that emits close to transform-limited pulses, providing diffraction-limited beam quality and narrow spectral width.

The GENKI HP comes with an integrated pulse picker and can be operated in burst-mode.

Excellent pointing stability in free-space output as well as fiber output is available.

Other options are external signal gathering and adjustable output power.

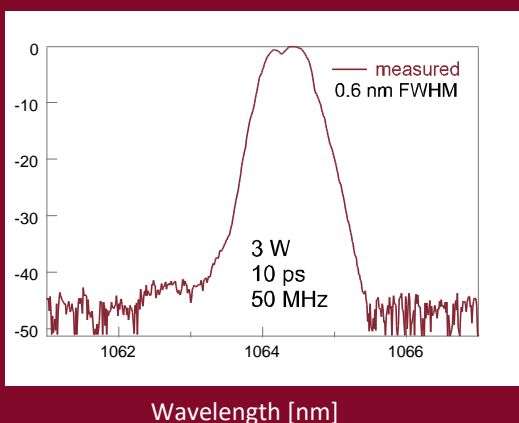
The GENKI HP is a compact, air-cooled, maintenance-free laser module which is packaged in a sealed, robust enclosure. It guarantees high stability and 24/7 operation.

Applications

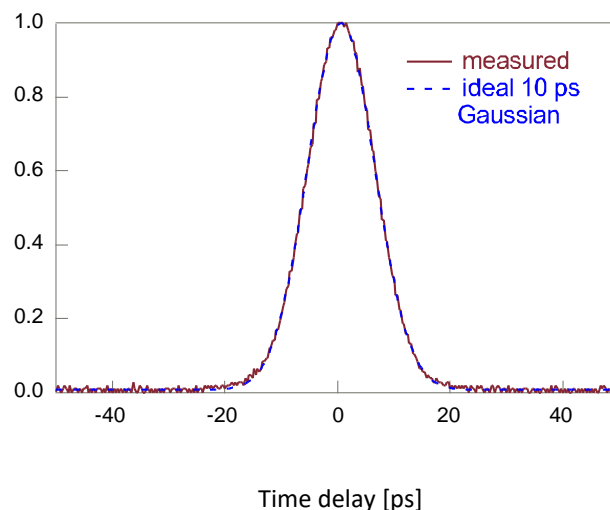
- Microscopy
- Material processing
- Time-resolved spectroscopy
- Supercontinuum generation
- Semiconductor inspection

Typical optical spectrum

Spectral power density [dBc/nm]



Typical pulse profile - Autocorrelation



Specifications

Optical

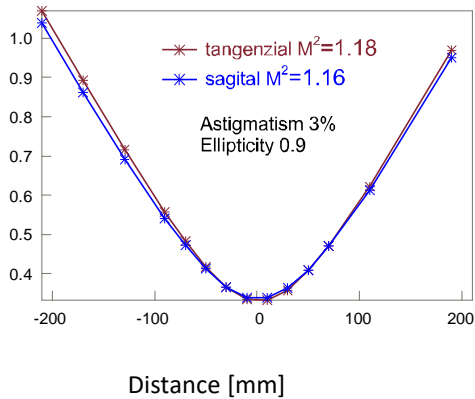
Model	GENKI 05 HP	GENKI 10 HP
Center wavelength	532 ± 2 nm	1064 ± 2 nm
Pulse duration	<10 ps	<10 ps
Average output power	>2.5 W	>5 W
Pulse energy	>50 nJ	>100 nJ
Pulse repetition rate	50 ± 5 MHz	50 ± 5 MHz
Spectral bandwidth	<4.0 nm	<4.0 nm
Beam quality	$M^2 \leq 1.3$, TEM ₀₀	$M^2 \leq 1.2$, TEM ₀₀
PER	>16 dB	>16 dB
Amplitude noise	<1% rms (24h)	<1% rms (24h)
Laser output	Collimated, free space	

Mechanical/Electrical

Warm-up time	<15 minutes
Operation temperature	18°C — 32°C
Storage temperature	-20°C — 55 °C
Power supply	24 VDC/9A DC or 90—264 VAC, 47—63 Hz
Power consumption	<500 W
Size laser head	125 x 420 x 260 mm ³
Weight laser head	15 kg
Size control unit	133 x 483 x 400 mm ³ (19"/3U rack mount)
Weight control unit	7 kg
Cooling	Air

Beam quality

Beam radius



Support and Warranty

All GENKI products come with industry leading reliability and are backed by our standard 2 year warranty.

However, should you need the extra security of an extended warranty and remote diagnostics support this is available in our support and warranty extension package.

Please contact your sales representative for more information.

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All GENKI products are produced under our quality management system certified in accordance with the ISO 9001:2015 and ISO 13485:2016 standard.

