



HIGH POWER PICOSECOND LASER MODULE

# GENKI HP



SWISS MADE

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

**COST-EFFECTIVE  
 PICOSECOND  
 LASER WITH  
 INTEGRATED  
 PULSE PICKER**

**OPTIONS:**

- + Green 515 – 532 nm
- + UVA 343 – 355 nm
- + UVC 258 – 266 nm
- + External signal gating
- + Adjustable output power

**MAIN APPLICATIONS:**

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

**OUTSTANDING FEATURES :**

- + Pedestal-free pulses
- + Low amplitude noise
- + Pulse picker
- + Burst-mode
- + Maintenance free – no alignment required
- + Remote control
- + 24/ 7 operation



GENKI - 10 HP	
CENTER WAVELENGTH	1030 – 1064 nm
PULSE DURATION <sup>1 2</sup>	4 – 45 ps
AVG. OUTPUT POWER [UP TO] <sup>2</sup>	20 W
PULSE ENERGY [UP TO] <sup>2</sup>	500 nJ
PULSE REPETITION RATE <sup>1 2</sup>	single shot – 100 MHz
SPECTRAL BANDWIDTH <sup>2</sup>	< 5 nm
BEAM QUALITY	$M^2 < 1.2$ , TEM <sub>00</sub>
PER	> 20 dB
AMPLITUDE NOISE [24 H]	< 1% rms, < 3% pk-pk
CENTER WL DRIFT [1 H]	< 0.1 nm pk-pk
LASER OUTPUT	collimated free space
ENVIRONMENTAL	
WARM-UP TIME	< 15 minutes
OPERATION TEMPERATURE	18 °C – 32 °C
STORAGE TEMPERATURE	- 20 °C – 65 °C
ON/OFF CYCLES	> 10000
MECHANICAL	
SIZE LASER HEAD <sup>3</sup>	125 x 420 x 260 mm <sup>3</sup>
WEIGHT LASER HEAD <sup>3</sup>	15 kg
SIZE CONTROL UNIT	133 x 483 x 400 mm <sup>3</sup> (19"/3U rack mount)
WEIGHT CONTROL UNIT	7 kg
ELECTRICAL	
POWER SUPPLY	24 VDC / 9A DC or 90 – 264 VAC, 47 – 63 Hz
POWER CONSUMPTION	< 500 W
COOLING	
LASER HEAD	air cooled
LASER CONTROLLER	air cooled

<sup>1</sup> Please inquire for possible combinations of pulse duration, average power and repetition rate

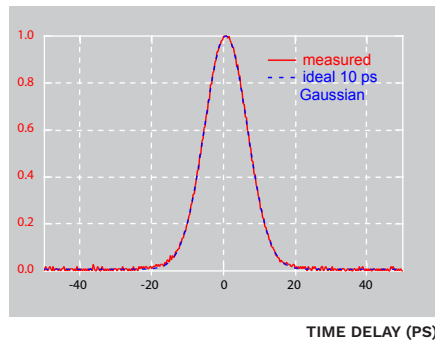
<sup>2</sup> Spectral bandwidth depends on pulse duration, pulse energy and repetition rate

<sup>3</sup> Exact size and weight depend on pulse duration, pulse repetition rate, average power and wavelength



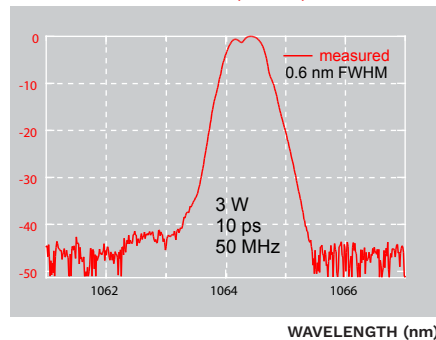
### PULSE PROFILE

AUTOCORRELATION SIGNAL



### OPTICAL SPECTRUM

POWER SPECTRAL DENSITY (dBc/nm)



### BEAM QUALITY

BEAM RADIUS

