

## Genki XP

High energy picosecond laser module



Swiss  
Made



Compact packaging  
for optimal and cost-effective  
workstation integration

Genki XP platform pushes industrialization of picosecond high energy lasers further. The system is based on the ultra-stable Genki seed laser and provides clean pulses shorter than 10 ps, which is an optimal pulse duration window for many micromachining applications. To satisfy the increasing demand of picosecond laser workstations, Genki XP has been optimized to provide up to 400  $\mu\text{J}$  at the industry-standard wavelength of 1064 nm. The laser can be tailored to work at lower repetition rates with very high energies or at several MHz to follow high-speed automated processes. Genki XP has been designed for the easiest and most cost-effective possible system integration, can be mounted in any direction and offers full remote control capability.



### Laser outstanding features:

- Burst mode
- Pulse energy up to 400  $\mu\text{J}$
- High pulse quality
- Narrow spectral width
- Excellent energy and pointing stability
- Mountable in any direction
- Maintenance free – no alignment required
- Complete remote control
- 24/7 operation

### Options:

- Green 515 – 532 nm
- UVA 343 – 355 nm
- UVC 258 – 266 nm
- Synchronization to external clock

### Main applications:

- Material processing
- Glass and sapphire cutting
- Plasma generation
- Nonlinear optics

# Picosecond Laser

# Genki XP



Laser specifications	Genki - 10 XP
Center wavelength <sup>1</sup>	<b>1030 – 1064 nm</b>
Pulse Duration <sup>1</sup>	1 – 45 ps
Avg. output power (up to) <sup>1</sup>	50 W
Pulse energy (up to) <sup>1</sup>	500 $\mu$ J
Pulse repetition rate <sup>1</sup>	single shot – 80 MHz
Spectral bandwidth	< 1 nm
Beam quality	$M^2 < 1.2$ , TEM <sub>00</sub>
PER	> 20 dB
Amplitude noise (24 h)	< 4.0% rms
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	136 x 715 x 306 mm <sup>3</sup>
Weight laser head	45 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/25 A or 90 – 264 VAC, 47 – 63 Hz
Power consumption	< 600 W
Cooling	
Laser head	water cooled
Laser controller	air cooled

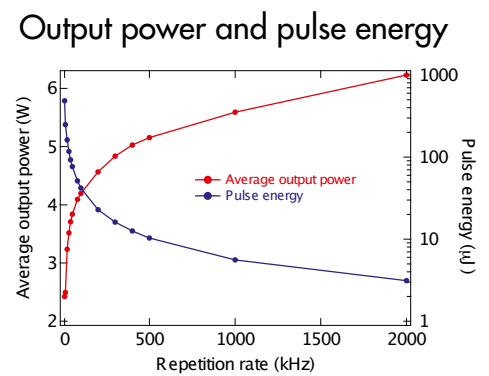
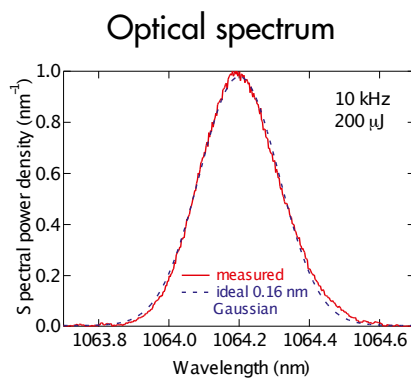
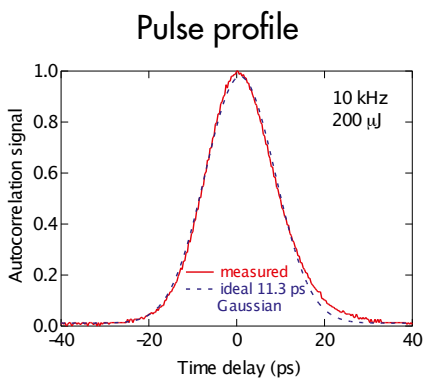


**IEC Compliant Product**  
 IEC 60068-2-27:2008  
 IEC 60068-2-6:2007  
 Shock & Vibration Test  
 IEC 60825-1:2014  
 Laser Radiation Safety

**ISO Certified Company**  
 ISO 9001 : 2008  
 ISO 13485 : 2012



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



Specifications subject to change without notice, March 2016