

Nanosecond mid-infrared laser

- Matched to vibrational stretch of water
- Pulse duration optimized for tissue modification with minimal collateral damage
- Compact
- All-in-one
- Turn-key 24/7 operation
- Easy to integrate



Specifications

Optical

Center wavelength ^a	~ 2800 nm
Pulse duration ^b	< 3 ns
Pulse energy	> 25 μJ
Pulse repetition rate ^c	< 1.5 kHz
Peak power	> 9 kW
Average power	> 37.5 mW
Beam quality, M ²	< 1.1
PER (vertical)	> 20 dB
Internal fast photodiode for trigger output	

- a) various emission lines available, inquire for exact wavelength
- b) longer pulses available
- c) triggerable externally or from internal clock

Cooling

Forced air-cooling	
Warm-up time	< 10 min
Operation temperature	15 – 35 °C
Storage temperature	-20 – 55 °C

Electrical

24 VDC / 4 A or 90 – 264 VAC, 47 – 63 Hz

Mechanical

Dimensions	260 x 230 x 72 mm ³
Weight	6 kg
3-point low-stress through-hole mounting accessible from top	

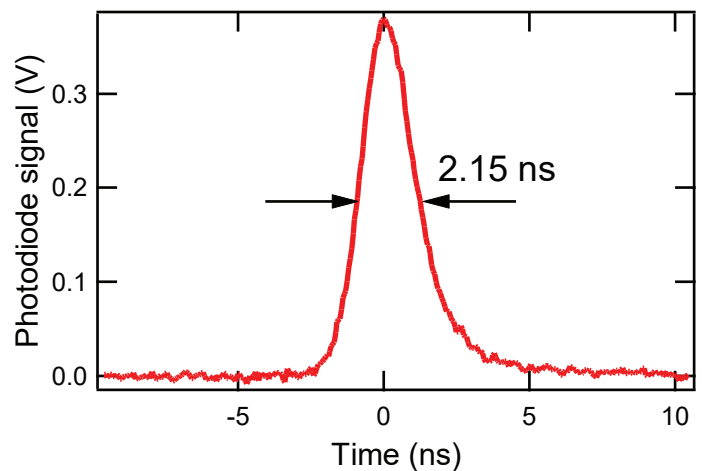
Options

- Fiber delivery
- Optical isolation stage
- Purging system

Applications

Mass spectroscopy / Semiconductor modification / Selective thin-film removal /
Mid-infrared photothermal microscopy / Seeding amplifier systems / Environmental sensing

Typical pulse shape measured with 1 GHz bandwidth in mid-infrared



Stability over 1 month in non-conditioned environment

