

# Pulsar

## Extreme Pulse Control & Tunability

Pulsar is a complete laser system enabling pulse energy and repetition rate tunability, offering the user an unmatched level of versatility. With the independent adjustment of three key parameters: repetition rate (MHz to 1 Hz), pulse energy (10 pJ to 10 nJ), and pulse duration ( $\leq 300$  fs).

Pulsar is an ideal laser for nonlinear optics applications, especially two-photon and three-photon absorption spectroscopy and microscopy.

### / Highlights

Pulse Energy Selection  
Repetition Rate Selection

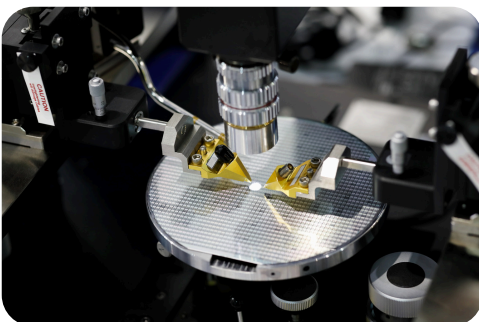


**Repetition Rate  
Tunability (Pulse Train):  
1 Hz to 10 MHz**

**Pulse Duration:  
 $\leq 300$  fs**

**Pulse Energy Tunability:  
10 pJ to 10 nJ**

### / Applications



TPA- TCT

Two-photon and three-photon  
absorption spectroscopy and  
microscopy.

# Pulsar

## / Technical Specifications

Repetition Rate Tunability (Pulse Train):

1 Hz to 10 MHz

Pulse Duration:

$\leq 300$  fs

Average Power:	100 mW @10 MHz
Pulse Duration:	$\leq 300$ fs
Central Wavelength:	1560 nm
Repetition Rate:	10 MHz (Fundamental)
Power Stability:	< 1 % (std. dev.)
Polarization:	Linearly Polarised
Optical Output:	Free Space
Synchronization / Connections:	TTL (SMA) - USB - Interlock
Beam Diameter:	2.1 mm or 3.5 mm (1/e <sup>2</sup> )
Spatial Mode Quality (M <sup>2</sup> ):	< 1.2
Cooling:	Thermoelectric cooler + air cooling
Power Requirements:	220 V / 110V - 50/60 Hz
Operating Temperature:	20 - 30 °C
Storage Temperature	0 - 60 °C
Electromechanical Shutter Output:	Rise-time: 1 ms, Sync. to Pulse train
Control Software:	User-friendly

OTHER DETAILED SPECS UNDER REQUEST

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## / Additional information



### Laser Security:

This product is a Class 3B laser.

Appropriate safety measures according to such laser class should be taken in its installation and use.

### Warranty:

12 months warranty

Extended warranty on request.

## / FYLA contact

### Sales contact

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