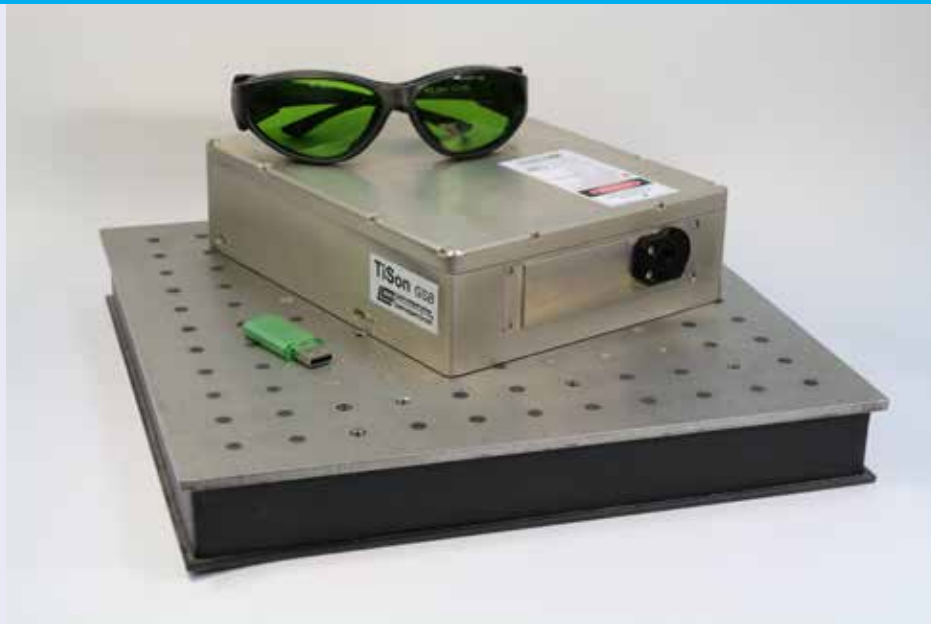


# Introducing the TiSon GSB

Compact. Broadly tunable. High energy. Nanosecond pulse.  
Titanium-Sapphire Laser



## A Full-Featured TiSon Laser

- High Pulse Energy
- Short Pulse Duration
- High Pulse-to-Pulse Stability
- Perfect Beam Quality
- Excellent Pointing Stability
- Maintenance-Free Operation
- Cost Effective
- Fully Automated Wavelength Tuning
- Fast Wavelength Change (<1ms)
- Random Wavelength Access
- Air-Cooled
- Ultra-Compact Footprint
- Fully Integrated Packaging
- No Free-Standing Pump Laser

**Greater than 400 millijoules  
at 800 nanometers**

**Pulse less than 6 nanoseconds**

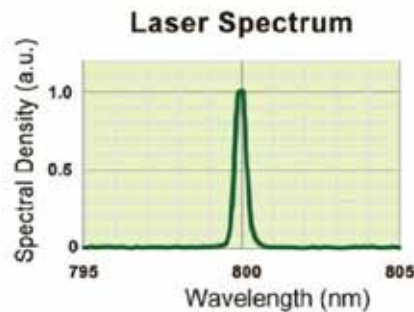
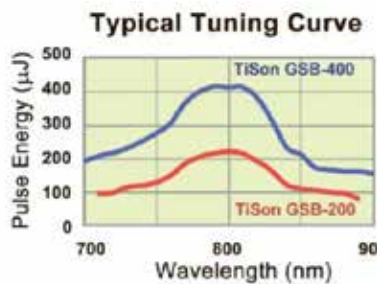
**Delta-Lambda less than 1.2 nanometers**

**Repetition rate of 1 kiloHertz**

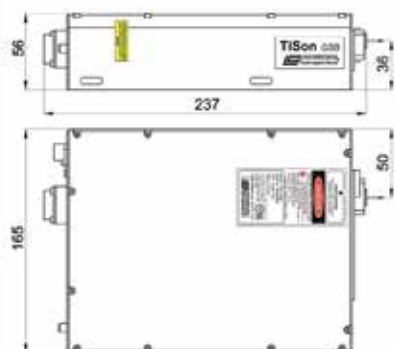


# TiSon GSB

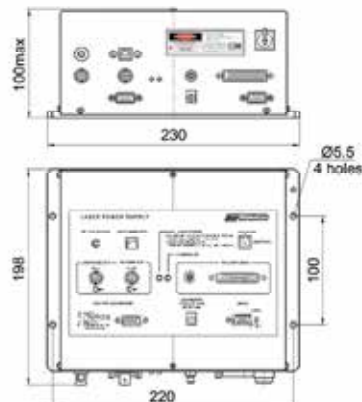
Specification	TiSon GSB-200	TiSon GSB-400
Wavelength Range, nm	710-890	700-900
Wavelength Tuning Method	automatic, PC controlled	
Wavelength Switching Time (between any wavelength in custom wavelength scanning mode)	< 1 ms	
Pulse Energy at 1 kHz, mJ	>90 at 710 nm	> 180 at 700 nm
	>125 at 750 nm	>250 at 750 nm
	>200 at 800 nm	>400 at 800 nm
	>100 at 850 nm	>200 at 850 nm
	>75 at 890 nm	>150 at 900 nm
Average Output Power, W	>0.2	>0.4
Linewidth of Laser Emission, nm	< 1.2	
Range of Pulse Repetition Rate	single pulse -1 kHz	
Pulse Duration (FWHM), ns	<7	<6
Pulse-to-Pulse Stability- StdDev/Mean	<2%	
Long-term Stability (Av.Power (RMS) / Av. Power)	<4%/8 hrs	
Beam Profile	TEM <sub>00</sub>	
Beam Diameter (1/e <sup>2</sup> at output aperture)	1 ± 0.2	
Beam Divergence (full angle, 1/e <sup>2</sup> , mrad)	< 1.6	
Beam Quality, M <sup>2</sup>	< 1.2	
Polarization Linearity	> 100:1, horizontal(< 5°)	
Laser Head Dimensions* (LxHxW), mm	237 X 56 X 165	
Power Supply Dimensions* (LxHxW), mm	198 X 100 X 230	
Weight of Laser Head, kg	3 ± 0.1	
Weight of Power Supply, kg	3.5 ± 0.1	
Operation Voltage, V	24± 10%	
Max. Current Consumption, A	<6	<8
Max. Power Consumption, W	<140	<210
Typical Power Consumption, W	<90	<135



**Drawing of Laser Head**



**Drawing of Power Supply**



**ISO 9001:2008  
certified**

