



# Pavilion Integration Corporation

## WhisperIT® Series

### W532 Green Lasers



## Features and Benefits

Compact  
Efficient  
Stable

Optics and Electronics in one small package  
Power Consumption and heat load < 4W  
WhisperIT® technology provides low noise output under all operating conditions  
Fast warm-up and turn on

Power on Demand



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## Applications

### Biotechnology

- Flow Cytometry
- DNA Sequencing
- Medical Imaging
- Confocal Microscopy

### Semiconductor Metrology

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WhisperIT® Green Lasers are diode pumped solid state (DPSS) lasers. The W532 lasers utilize an ultracompact and efficient (<4W) laser design.

The 532nm lasers are available with round or elliptical beams.



## SPECIFICATIONS

### Free Space System

#### W532-10FS

#### W532-20FS

#### W532-30FS

#### W532-40FS

#### W532-50FS

Laser Wavelength	532 +/- 1nm				
Output Power	10mW	20mW	30mW	40mW	50mW
RMS noise (20 Hz to 2 MHz)	< 0.5 %				
Power Stability over 24 hours	<1% at room temperature $\Delta T=3^{\circ}C$				
Circular Beam Diameter <sup>2</sup>	0.7, 1.0mm				
Beam Divergence	1 mrad for 1mm beam diameter				
M-squared ( $M^2$ )	<1.2				
Pointing Stability	<6 $\mu rad/^{\circ}C$				
Beam Static Alignment Tolerance	Position +/- 0.5mm; Angle +/- 2.5 mrad				
Warm-up Time	<1min (typical 10 sec)				
Polarization	>100:1; vertical +/- $3^{\circ}$ , other extinction ratios and orientations available				

### Fiber Coupled System

#### W532-10PM

#### W532-20PM

#### W532-30PM

Laser Wavelength	532 +/- 1nm		
Output Power	10mW	20mW	30mW
RMS noise (20 Hz to 2 MHz)	< 0.5 %		
Power Stability over 24 hours	<2% at room temperature $\Delta T=3^{\circ}C$		
Fiber Type	PM Fiber (SM and MM available)		
Fiber Termination	FC/APC (Collimator option available)		
Fiber Length / Jacketing	2 m / 0.9mm or 3mm (other options available)		
Fiber N.A. <sup>1</sup>	0.12 (Typical)		
Warm-up Time	<1min (typical 30 sec)		
Beam Size with Collimator	0.7 mm (other sizes available)		
M-squared ( $M^2$ ) with Collimator	< 1.1		
Polarization ratio (remote head only)	> 100:1		



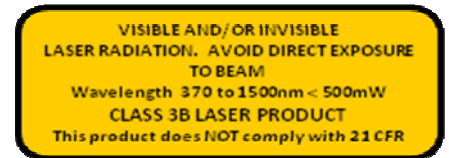
## SPECIFICATIONS

### Environmental & Operating

Base Plate Temperature	10 to 45°C Operating; -10 to 65°C Non-operating
Shock (11ms duration)	1g Operating; 25g Non-operating
Vibration	0.3g Operating; 2g Non-operating
Humidity	5% - 95% Non-condensing
Altitude	< 3,000m Operating; < 20,000m Non-operating
Safety Certification	IEC60825-1
DC Power Supply <sup>3</sup>	5V +/- 10%, 2 Amp
Optional Interface	Remote On (Low) and Off (Hi); Power Monitoring 0 – 2.5 V; External Power Adjustment 0 – 2.5 V
Optional AC Power Supply	CDRH compliant control box available with built-in AC power supply
Mounting Surface Flatness	0.03mm
Dimensions	86mm (L) x 40 mm (W) x 36 mm (H)

### This is an OEM Product. CDRH Control box is available for samples or Laboratory use

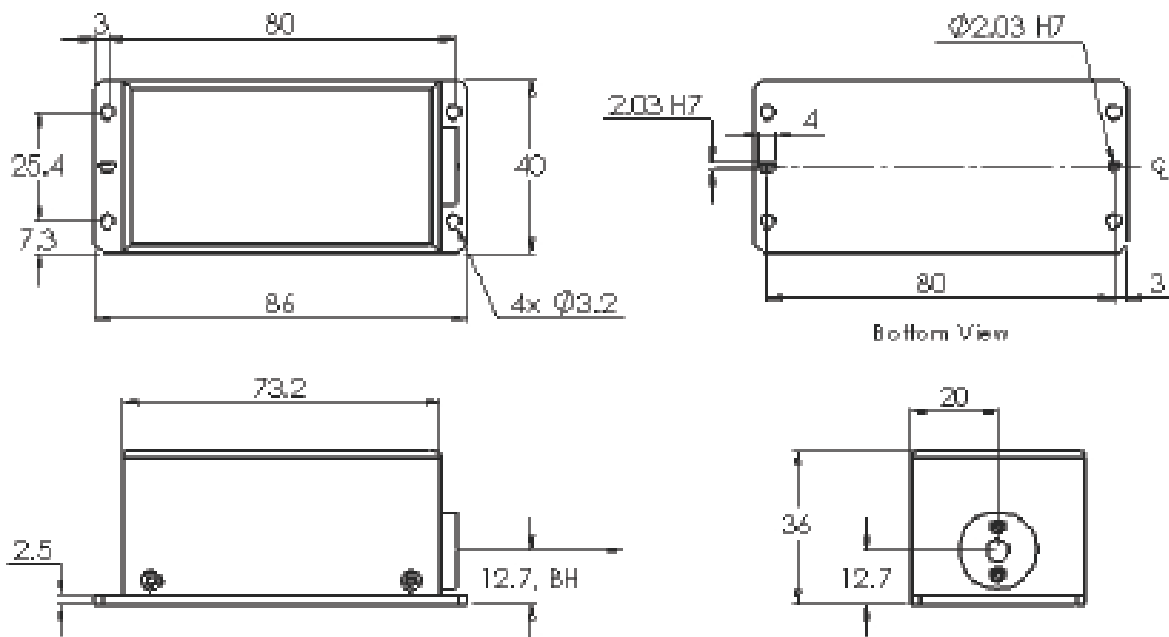
Invisible or visible radiation is dangerous to humans and should not be viewed directly or indirectly with or without optical instruments. Please refer to IEC 825-1 "Safety of Laser Products" and 21 CFR 1040.10-1040.11 "Performance Standards for Light Emitting Products" for additional information



Pavilion Integration Corporation follows a continuous improvement program. Specifications subject to change without notice. Pavilion Integration Corporation offers a 1 year limited warranty.



**Dimensions (mm)**  
**Free Space Laser**





**Dimensions (mm)**  
**Fiber Coupled Laser**

