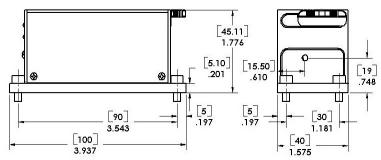
VORTRAN LASER TECHNOLOGY, INC Stradus[®] 808-150

The Stradus[®] diode laser module is a fully integrated, plug and play, and self-contained laser module. The patented sealed optical cavity and the innovative electronics give the Stradus[®] unparalleled power stability, beam pointing stability, and low noise over time and temperature. Vortran's Graphical User Interface (GUI) software allows the user to control and monitor the module remotely via USB or RS-232.

Wavelength (nm)808 ± 10Power Output (mW)150 (-0%, +10%)Spatial ModeTEM00Beam Diameter (mm, 1/e²)~1.3 or ~1.0Beam Divergence (mrad)~0.5 or ~1.0M² (typical)<1.25Beam Circularity>90%Beam Centration (mm)<0.5Beam Alignment (mrad)<5Pointing Stability (µrad/°C)<5Power Stability (µrad/°C)<5Power Stability (µrad/°C)<0.5%Polarization Orientation>100:1RMS Noise (10Hz to 10MHz)<0.2%Digital Modulation (-3dB)10MHzDigital Rise Time<50nsecModulation Depth (-3dB) ∞ (full off)Analog Modulation500kHzAnalog Rise Time<0.7 µsInput Power (Control Box)90-250 VAC, 50/60HzStorage Temperature-10°C to +60°COperating Temperature+10°C to +45°CLaser Head Weight210gCDRH ClassClass IllbESD ProtectionClass 4EU ComplianceCE Mark Certified with control boxRoHS ComplianceEU and China				
Spatial ModeTEM00Beam Diameter (mm, $1/e^2$)~1.3 or ~1.0Beam Divergence (mrad)~0.5 or ~1.0M² (typical)<1.25	Wavelength (nm)	808 ± 10		
Beam Diameter (mm, 1/e²)~1.3 or ~1.0Beam Divergence (mrad)~0.5 or ~1.0M² (typical)< 1.25		150 (-0%, +10%)		
Beam Divergence (mrad)~0.5 or ~1.0 M^2 (typical)< 1.25	Spatial Mode	TEM ₀₀		
M² (typical)< 1.25Beam Circularity> 90%Beam Centration (mm)< 0.5	Beam Diameter (mm, 1/e ²)	~1.3 or ~1.0		
Beam Circularity> 90%Beam Centration (mm)< 0.5	Beam Divergence (mrad)	~0.5 or ~1.0		
Beam Centration (mm)< 0.5Beam Alignment (mrad)< 5	M ² (typical)	< 1.25		
Beam Alignment (mrad)< 5	Beam Circularity	> 90%		
Pointing Stability (µrad/°C)< 5	Beam Centration (mm)	< 0.5		
Power Stability (over 24 hours)< 0.5%Polarization OrientationVertical ±2°Polarization Extinction Ratio>100:1RMS Noise (10Hz to 10MHz)<0.2%	Beam Alignment (mrad)	< 5		
Polarization OrientationVertical ±2°Polarization Extinction Ratio>100:1RMS Noise (10Hz to 10MHz)<0.2%	Pointing Stability (µrad/°C)	< 5		
Polarization Extinction Ratio>100:1RMS Noise (10Hz to 10MHz)<0.2%	Power Stability (over 24 hours)	< 0.5%		
RMS Noise (10Hz to 10MHz)<0.2%Digital Modulation (-3dB)10MHzDigital Rise Time< 50nsec	Polarization Orientation	Vertical ±2°		
Digital Modulation (-3dB)10MHzDigital Rise Time< 50nsec	Polarization Extinction Ratio	>100:1		
Digital Rise Time< 50nsecModulation Depth (-3dB)∞ (full off)Analog Modulation500kHzAnalog Rise Time< 0.7 μs	RMS Noise (10Hz to 10MHz)	<0.2%		
Modulation Depth (-3dB)∞ (full off)Analog Modulation500kHzAnalog Rise Time< 0.7 μs	Digital Modulation (-3dB)	10MHz		
Analog Modulation500kHzAnalog Rise Time< 0.7 μs	Digital Rise Time	< 50nsec		
Analog Rise Time< 0.7 μsInput Power (Head)12V DC, 1.5A (max)Input Power (Control Box)90-250 VAC, 50/60HzStorage Temperature-10°C to +60°COperating Temperature+10°C to +45°CLaser Head Weight210gCommunicationMini-USB and RS-232CDRH ClassClass IIIbESD ProtectionClass 4EU ComplianceCE Mark Certified with control box	Modulation Depth (-3dB)	∞ (full off)		
Input Power (Head)12V DC, 1.5A (max)Input Power (Control Box)90-250 VAC, 50/60HzStorage Temperature-10°C to +60°COperating Temperature+10°C to +45°CLaser Head Weight210gCommunicationMini-USB and RS-232CDRH ClassClass IIIbESD ProtectionClass 4EU ComplianceCE Mark Certified with control box	Analog Modulation	500kHz		
Input Power (Control Box)90-250 VAC, 50/60HzStorage Temperature-10°C to +60°COperating Temperature+10°C to +45°CLaser Head Weight210gCommunicationMini-USB and RS-232CDRH ClassClass IIIbESD ProtectionClass 4EU ComplianceCE Mark Certified with control box	Analog Rise Time	< 0.7 µs		
50/60HzStorage Temperature-10°C to +60°COperating Temperature+10°C to +45°CLaser Head Weight210gCommunicationMini-USB and RS-232CDRH ClassClass IIIbESD ProtectionClass 4EU ComplianceCE Mark Certified with control box	Input Power (Head)	12V DC, 1.5A (max)		
Storage Temperature-10°C to +60°COperating Temperature+10°C to +45°CLaser Head Weight210gCommunicationMini-USB and RS-232CDRH ClassClass IIIbESD ProtectionClass 4EU ComplianceCE Mark Certified with control box	Input Power (Control Box)			
Operating Temperature+10°C to +45°CLaser Head Weight210gCommunicationMini-USB and RS-232CDRH ClassClass IIIbESD ProtectionClass 4EU ComplianceCE Mark Certified with control box		50/60Hz		
Laser Head Weight210gCommunicationMini-USB and RS-232CDRH ClassClass IIIbESD ProtectionClass 4EU ComplianceCE Mark Certified with control box	Storage Temperature	-10°C to +60°C		
CommunicationMini-USB and RS-232CDRH ClassClass IIIbESD ProtectionClass 4EU ComplianceCE Mark Certified with control box	Operating Temperature	+10°C to +45°C		
RS-232 CDRH Class ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Laser Head Weight	210g		
CDRH ClassClass IIIbESD ProtectionClass 4EU ComplianceCE Mark Certified with control box	Communication	Mini-USB and		
ESD ProtectionClass 4EU ComplianceCE Mark Certified with control box		RS-232		
EU Compliance CE Mark Certified with control box	CDRH Class	Class IIIb		
with control box	ESD Protection	Class 4		
with control box	EU Compliance	CE Mark Certified		
RoHS Compliance EU and China		with control box		
	RoHS Compliance	EU and China		



- Medical, Biomedical & Industrial
- Patented Sealed Optical Cavity
- Self-contained & Compact
- Excellent Beam Quality
- Low Noise
- USB or RS-232 Interface with GUI
- Analog & Digital Modulation
- OEM Head or End-user Systems



Graphical User Interface Software

Print	Home	Information	Terminal	USB R	S-232		785 nn
Status	Digita	Modulation	Laser Out	put			Base Plate
FAULT	ON		100 90 -	ower	Max	mW	°C
STANDBY	Exter ON	nal Control	80	= 80		SET	4
ACTIVE		Emission	50				21
Laser Hour 187	5	OFF	20 -				6
YO		RAN	80	mW	0	Current 135 mA	Diode 25 °





Note: Specifications guaranteed only at full power

Vortran Laser Technology, Inc. follows a continuous improvement process. Specifications are subject to change. © Vortran Laser Technology, Inc. 2021