

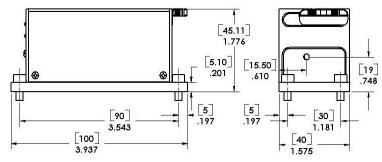
Stradus 514-60

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® laser 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.

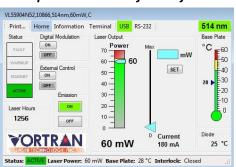
Wavelength (nm)515 ± 5Power Output (mW)60 (-0%, +10%)Spatial ModeTEM₀₀Small Beam (mm, mrad)~0.9, ~1.0Standard Beam (mm, mrad)~1.2, ~0.6M² (typical)< 1.25Beam Circularity> 90%Beam Centration (mm)< 0.5Beam Alignment (mrad)< 5Pointing Stability (μrad/°C)< 5Power Stability (over 24 hours)< 0.5%Polarization OrientationVertical ±2°Polarization Extinction Ratio>100:1RMS Noise (10Hz to 10MHz)< 0.25%Digital Modulation200MHzDigital Rise Time< 2nsecModulation Depth∞ (full off)Analog Modulation500kHzAnalog 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 boxRoHS ComplianceEU and China		T
Spatial ModeTEM₀₀Small Beam (mm, mrad)~0.9, ~1.0Standard Beam (mm, mrad)~1.2, ~0.6M² (typical)<1.25	Wavelength (nm)	515 ± 5
Small Beam (mm, mrad)~0.9, ~1.0Standard Beam (mm, mrad)~1.2, ~0.6M² (typical)< 1.25	Power Output (mW)	60 (-0%, +10%)
Standard Beam (mm, mrad)~1.2, ~0.6M² (typical)< 1.25	Spatial Mode	TEM ₀₀
M² (typical)< 1.25Beam Circularity> 90%Beam Centration (mm)< 0.5	Small Beam (mm, mrad)	~0.9, ~1.0
Beam Circularity > 90% Beam Centration (mm) < 0.5 Beam Alignment (mrad) < 5 Pointing Stability (μrad/°C) < 5 Power Stability (over 24 hours) < 0.5% Polarization Orientation Vertical ±2° Polarization Extinction Ratio >100:1 RMS Noise (10Hz to 10MHz) <0.25% Digital Modulation 200MHz Digital Rise Time < 2nsec Modulation Depth ∞ (full off) Analog Modulation 500kHz Analog Rise Time < 0.7 μs Input Power (Head) 12V DC, 1.5A (max) Input Power (Control Box) 90-250 VAC, 50/60Hz Storage Temperature -10°C to +60°C Operating Temperature +10°C to +45°C Laser Head Weight 210g Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Standard Beam (mm, mrad)	~1.2, ~0.6
Beam Centration (mm) < 0.5 Beam Alignment (mrad) < 5 Pointing Stability (μrad/°C) < 5 Power Stability (over 24 hours) < 0.5% Polarization Orientation Vertical ±2° Polarization Extinction Ratio >100:1 RMS Noise (10Hz to 10MHz) <0.25% Digital Modulation 200MHz Digital Rise Time < 2nsec Modulation Depth ∞ (full off) Analog Modulation 500kHz Analog Rise Time < 0.7 μs Input Power (Head) 12V DC, 1.5A (max) Input Power (Control Box) 90-250 VAC, 50/60Hz Storage Temperature -10°C to +60°C Operating Temperature +10°C to +45°C Laser Head Weight 210g Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box	M² (typical)	< 1.25
Beam Alignment (mrad) < 5 Pointing Stability (μrad/°C) < 5 Power Stability (over 24 hours) < 0.5% Polarization Orientation Vertical ±2° Polarization Extinction Ratio >100:1 RMS Noise (10Hz to 10MHz) <0.25% Digital Modulation 200MHz Digital Rise Time < 2nsec Modulation Depth ∞ (full off) Analog Modulation 500kHz Analog Rise Time < 0.7 μs Input Power (Head) 12V DC, 1.5A (max) Input Power (Control Box) 90-250 VAC, 50/60Hz Storage Temperature -10°C to +60°C Operating Temperature +10°C to +45°C Laser Head Weight 210g Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Beam Circularity	> 90%
Pointing Stability (μrad/°C)< 5Power Stability (over 24 hours)< 0.5%	Beam Centration (mm)	< 0.5
Power Stability (over 24 hours) < 0.5% Polarization Orientation Vertical ±2° Polarization Extinction Ratio >100:1 RMS Noise (10Hz to 10MHz) <0.25% Digital Modulation 200MHz Digital Rise Time <2nsec Modulation Depth ∞ (full off) Analog Modulation 500kHz Analog Rise Time <0.7 μs Input Power (Head) 12V DC, 1.5A (max) Input Power (Control Box) 90-250 VAC, 50/60Hz Storage Temperature -10°C to +60°C Operating Temperature +10°C to +45°C Laser Head Weight 210g Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Beam Alignment (mrad)	< 5
Polarization OrientationVertical ±2°Polarization Extinction Ratio>100:1RMS Noise (10Hz to 10MHz)<0.25%	Pointing Stability (μrad/°C)	< 5
Polarization Extinction Ratio>100:1RMS Noise (10Hz to 10MHz)<0.25%	Power Stability (over 24 hours)	< 0.5%
RMS Noise (10Hz to 10MHz) <0.25% Digital Modulation 200MHz Digital Rise Time <2nsec Modulation Depth ∞ (full off) Analog Modulation 500kHz Analog Rise Time <0.7 μs Input Power (Head) 12V DC, 1.5A (max) Input Power (Control Box) 90-250 VAC, 50/60Hz Storage Temperature -10°C to +60°C Operating Temperature +10°C to +45°C Laser Head Weight 210g Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Polarization Orientation	Vertical ±2°
Digital Modulation200MHzDigital Rise Time< 2nsec	Polarization Extinction Ratio	>100:1
Digital Rise Time< 2nsecModulation Depth∞ (full off)Analog Modulation500kHzAnalog Rise Time< 0.7 μs	RMS Noise (10Hz to 10MHz)	<0.25%
Modulation Depth∞ (full off)Analog Modulation500kHzAnalog Rise Time< 0.7 μs	Digital Modulation	200MHz
Analog Modulation 500kHz Analog Rise Time < 0.7 µs Input Power (Head) 12V DC, 1.5A (max) Input Power (Control Box) 90-250 VAC, 50/60Hz Storage Temperature -10°C to +60°C Operating Temperature +10°C to +45°C Laser Head Weight 210g Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Digital Rise Time	< 2nsec
Analog Rise Time < 0.7 µs Input Power (Head) 12V DC, 1.5A (max) Input Power (Control Box) 90-250 VAC, 50/60Hz Storage Temperature -10°C to +60°C Operating Temperature +10°C to +45°C Laser Head Weight 210g Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Modulation Depth	∞ (full off)
Input Power (Head) Input Power (Control Box) Input Power (Control Box) Storage Temperature Operating Temperature Laser Head Weight Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection CE Mark Certified with control box	Analog Modulation	500kHz
Input Power (Control Box) 90-250 VAC, 50/60Hz Storage Temperature -10°C to +60°C Operating Temperature +10°C to +45°C Laser Head Weight 210g Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Analog Rise Time	< 0.7 μs
Storage Temperature -10°C to +60°C Operating Temperature +10°C to +45°C Laser Head Weight Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection EU Compliance CE Mark Certified with control box	Input Power (Head)	12V DC, 1.5A (max)
Storage Temperature Operating Temperature Laser Head Weight Communication Mini-USB and RS-232 CDRH Class ESD Protection EU Compliance CE Mark Certified with control box	Input Power (Control Box)	90-250 VAC,
Operating Temperature +10°C to +45°C Laser Head Weight 210g Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box		50/60Hz
Laser Head Weight Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Storage Temperature	-10°C to +60°C
Communication Mini-USB and RS-232 CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Operating Temperature	+10°C to +45°C
CDRH Class Class IIIb ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Laser Head Weight	210g
CDRH Class ESD Protection Class 4 EU Compliance CE Mark Certified with control box	Communication	Mini-USB and
ESD Protection Class 4 EU Compliance CE 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
	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



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