

## ti Series: 60W - 100W Lasers & Performance

Performance	ti60	ti60W	ti60HS
Output Power	60W	60W	60W
Mode Quality	$M^2 \leq 1.2$	$M^2 \leq 1.2$	$M^2 \leq 1.2$
Rise Time	< 75 $\mu$ sec	< 75 $\mu$ sec	< 75 $\mu$ sec
Beam Diameter	2.2 mm $\pm$ 0.3 mm	2.2 mm $\pm$ 0.3 mm	2.2 mm $\pm$ 0.3 mm
Beam Divergence (full angle)	< 7.0 mR	< 7.0 mR	< 7.0 mR
Wavelength	9.3 $\mu$ m/10.2 $\mu$ m/ 10.6 $\mu$ m	9.3 $\mu$ m/10.2 $\mu$ m/ 10.6 $\mu$ m	9.3 $\mu$ m/10.2 $\mu$ m/ 10.6 $\mu$ m
Power Stability from cold start (guaranteed)/after 2 min. (typical)	$\pm$ 7%/ $\pm$ 6%	$\pm$ 7%/ $\pm$ 6%	$\pm$ 4%/ $\pm$ 2%
Cooling	Air/Fan	Water	Water
Heat Load (max)	900 W	900 W	900 W
Input Voltage/Current	48 VDC/18A	48 VDC/18A	48 VDC/18A
Dimensions Inches (mm)	22.46 x 6.22 x 5.83 (571 x 158 x 148) Fan 22.46 x 7.72 x 5.9 (571 x 196 x 150)	21.4 x 4.1 x 5.9 (544 x 104 x 150)	21.4 x 4.1 x 5.9 (544 x 104 x 150)
Weight	25.5 lbs./11.6 kg 28.9 lbs./13.1 kg (Fan)	26.2 lbs./11.9 kg	42.6 lbs./19 kg
Data Sheet	Data Sheets, Technical Drawings, and Manuals can only be downloaded when accessing the full site from a desktop or laptop computer.		
Technical Drawing			
Manual			

Performance	ti80	ti80W	ti80HS
Output Power	80W	80W	80W
Mode Quality	$M^2 \leq 1.2$	$M^2 \leq 1.2$	$M^2 \leq 1.2$
Rise Time	< 75 $\mu$ sec	< 75 $\mu$ sec	< 75 $\mu$ sec
Beam Diameter	2.2 mm $\pm$ 0.3 mm	2.2 mm $\pm$ 0.3 mm	2.2 mm $\pm$ 0.3 mm
Beam Divergence (full angle)	< 7.0 mR	< 7.0 mR	< 7.0 mR
Wavelength	9.3 $\mu$ m/10.2 $\mu$ m/ 10.6 $\mu$ m	9.3 $\mu$ m/10.2 $\mu$ m/ 10.6 $\mu$ m	9.3 $\mu$ m/10.2 $\mu$ m/ 10.6 $\mu$ m
Power Stability from cold start (guaranteed)/after 2 min. (typical)	$\pm$ 7%/ $\pm$ 6%	$\pm$ 7%/ $\pm$ 6%	$\pm$ 4%/ $\pm$ 2%
Cooling	Air/Fan	Water	Water
Heat Load (max)	1200 W	1200 W	1200 W
Input Voltage/Current	48 VDC/22A	48 VDC/22A	48 VDC/22A
Dimensions Inches (mm)	22.46 x 6.22 x 5.83 (571 x 158 x 148) Fan 22.46 x 7.72 x 5.9 (571 x 196 x 150)	21.4 x 4.1 x 5.9 (544 x 104 x 150)	21.4 x 4.1 x 5.9 (544 x 104 x 150)
Weight	25.5 lbs./11.6 kg 28.9 lbs./13.1 kg (Fan)	26.2 lbs./11.9 kg	42.6 lbs./19 kg
Data Sheet	Data Sheets, Technical Drawings, and Manuals can only be downloaded when accessing the full site from a desktop or laptop computer.		
Technical Drawing			
Manual			

Performance	ti100	ti100W	ti100HS	ti100p
Output Power	100W	100W	100W	100W
Mode Quality	$M^2 \leq 1.2$	$M^2 \leq 1.2$	$M^2 \leq 1.2$	$M^2 \leq 1.2$
Rise Time	< 75 $\mu$ sec	< 75 $\mu$ sec	< 75 $\mu$ sec	< 75 $\mu$ sec
Beam Diameter	2.0 mm $\pm$ 0.3 mm	2.0 mm $\pm$ 0.3 mm	2.0 mm $\pm$ 0.3 mm	2.0 mm $\pm$ 0.3 mm
Beam Divergence (full angle)	< 7.0 mR	< 7.0 mR	< 7.0 mR	< 7.0 mR
Wavelength	9.3 $\mu$ m/10.2 $\mu$ m/ 10.6 $\mu$ m	9.3 $\mu$ m/10.2 $\mu$ m/ 10.6 $\mu$ m	9.3 $\mu$ m/10.2 $\mu$ m/ 10.6 $\mu$ m	9.3 $\mu$ m/10.2 $\mu$ m/ 10.6 $\mu$ m
Power Stability from cold start (guaranteed)/after 2 min. (typical)	$\pm$ 7%/ $\pm$ 6%	$\pm$ 7%/ $\pm$ 6%	$\pm$ 4%/ $\pm$ 2%	$\pm$ 7%/ $\pm$ 6%
Cooling	Air/Fan	Water	Water	Water
Heat Load (max)	1700 W	1700 W	1700 W	1700W
Input Voltage/Current	48 VDC/35A	48 VDC/35A	48 VDC/35A	48 VDC/35A
Dimensions Inches (mm)	21.4 x 4.1 x 5.9 (544 x 104 x 150)	21.4 x 4.1 x 5.9 (544 x 104 x 150)	21.4 x 4.1 x 5.9 (544 x 104 x 150)	24.9 x 5.6 x 5.9 (633 x 142 x 150)
Weight	32.1 lbs./14.6 kg	26.2 lbs./11.9 kg	42 lbs./19 kg	26.7 lbs./12.1 kg
Data Sheet	Data Sheets, Technical Drawings, and Manuals can only be downloaded when accessing the full site from a desktop or laptop computer.			
Technical Drawing				
Manual				

## Related Products

Product	Description	Go To
Power Supply	Recommended DC power supply for Synrad lasers	See AC/DC Power Supplies under Accessories for the recommended power supply