

YLS-SM_x SERIES

Power Beaming Lasers

Up to 30 kW of CW Power High Brightness Beam









FEATURES

- ▶ Up to 30 kW Average Power
- ▶ High Brightness Beam
- ▶ High Wall-plug Efficiency
- ▶ Maintenance-free Operation
- ▶ Modular 'Plug & Play' Design
- ▶ Compact, Rugged & Easy to Install



APPLICATIONS

- ▶ Directed Energy
- ▶ Power Beaming
- ▶ Remote Materials Processing

IPG YLS-SMx Series Ytterbium fiber laser provide 30 kW of continuous power in low order beams with low divergence. YLS-SMx lasers feature dynamic power modulation range from 10% to full power up to 5 kHz with no change in beam divergence or beam profile. The YLS-SMx lasers are designed for advanced applications requiring high power and brightness such as directed energy, power beaming and remote materials processing.

YLS-SMx SERIES

Power Beaming Lasers

Optical Characteristics	YLS-15000-SM3	YLS-20000-SM4	YLS-20000-SM7
Wavelength, nm		1075 ±5	
Mode of Operation		CW/modulated	
Modulation Frequency, kHz		0 - 5	
Maximum Average Power, kW	15	20	30
Power Tunability, %		10-100	
Power Stability*, %		±2	
Beam Quality, M ²	$M^2 < 2.5$	BPP<1.2, 1.0 typ.	BPP<2.0, 1.6 typ.
Beam Divergence, mrad	<150	<90	<95
Output Fiber Length, m		2 - 4	

^{*} Over 4 hours, T=const

General Characteristics	YLS-15000-SM3	YLS-20000-SM4	YLS-20000-SM7
Cabinet Dimensions (W \times D \times H), mm	1008 × 808 × 1055		1008 × 808 × 1380
Weight, kg	650		1000
Supply Voltage, 3-phase, VAC		400-480	
Power Consumption, kW	<68, typ. 59	<65, typ. 55	<95, typ. 85





DANGER - INVISIBLE LASER RADIATION AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION CLASS 4 LASER PRODUCT IEC 60825-1:2014