

RP-D-xxx-TD-Series

Electro-optic Q-switched laser



Product Details | RP-D-xxx-TD-Series

LD PUMPED ALL-SOLID-STATE ELECTRO-OPTIC Q-SWITCHED LASER

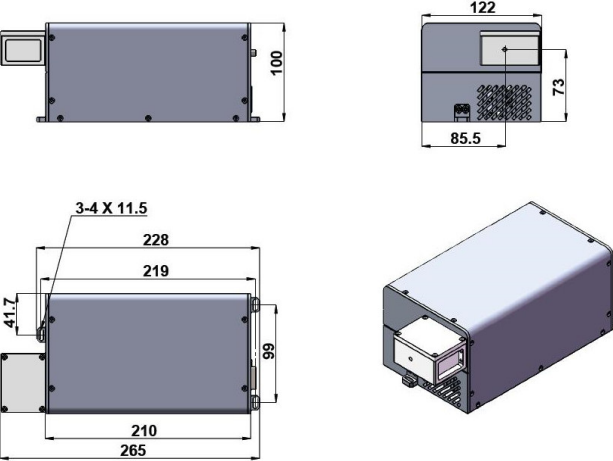
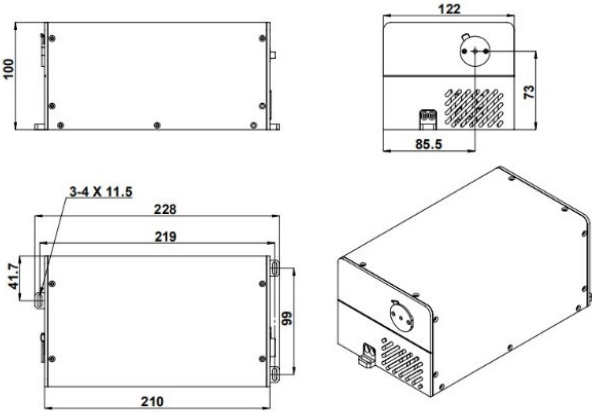
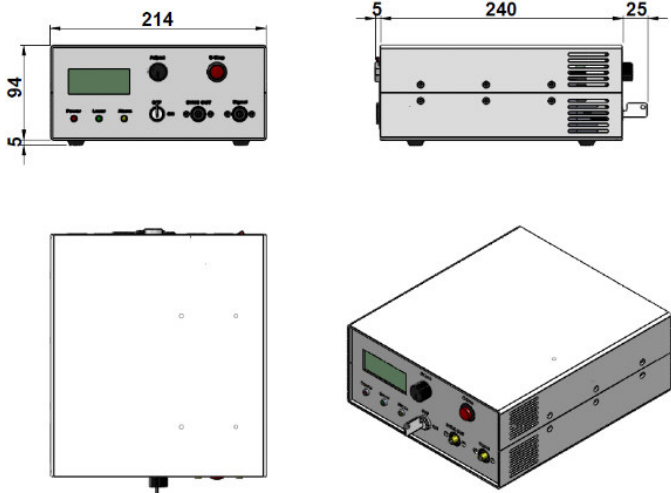


Part number	RP-D-213-TD		RP-D-266-TD		RP-D-355-TD
Wavelength (nm)	213±1		266±1		355±1
Operating mode	Electro-optics Q-switched				
Rep. rate (kHz)	0.01~1	0.01~1	1~10	0.01~1	1~20
Max average power (mW)(1)	1~5	1~40	1~50	1~70	1~150
Single pulse energy (μJ)	1~5	1~40	1~10 (10@1kHz, 5@10kHz)	1~70	1~15 (~15@<10kHz, 5@20kHz)
Pulse duration (ns)	~1.5	~1.5	~1.3	~1.3	~1.3@<10kHz, ~1.7@20kHz
Peak power(kW)	0.6~3.3	0.6~26.6	0.7~7.6	0.7~53.8	0.5~11.5
Power Stability (rms, over 4 hours)	<5%				
Transverse mode	Near TEM ₀₀				
M ² factor	<2.0				
Beam Diameter at the aperture 1/e ² (mm)	~1.5				
Warm-up Time (minutes)	<10				
Beam height from base plate (mm)	73				
Operating temperature (°C)	10~35				
Power supply (90-264VAC)	QDI-RPZ-FA				
Expected lifetime (hours)	5000		10000		



Part number	RP-D-532-TD			RP-D-1064-TD	
Wavelength (nm)	532±1			1064±1	
Operating mode	Electro-optics Q-switched				
Rep. rate (kHz)	0.001-1	1-20	0.001-1	1-20	1-100
Max average power (mW)(1)	1~150	1~450	1~300	1~1500	1~1500
Single pulse energy (μJ)	1~150 (150@1kHz)	1~50 (50@1kHz, 12@20kHz)	1~300 (300@1kHz)	1~100 (100@1kHz, 75@20kHz)	1~100 (100@1kHz, 60@20kHz, 25@50kHz, 10@100kHz)
Pulse duration (ns)	~1.5	~1.3 (~1.3@1kHz, ~1.9@20kHz)	~1.8	~1.6 (~1.6@1kHz, ~2.0@20kHz)	~1.3 (~1.3@1kHz, ~3@20kHz, ~5@50kHz, ~8@100kHz)
Peak power(kW)	0.6-100	0.7-38	0.5-160	0.5-60	0.125~76.9
Power Stability (rms, over 4 hours)	<5%, <3%, <2%, <1%				
Transverse mode	Near TEM ₀₀				
M ² factor	<2.0				
Beam Diameter at the aperture 1/e ² (mm)	~1.0				
Beam divergence, full angle (mrad)	<1.5				
Warm-up Time (minutes)	<10				
Beam height from base plate (mm)	73				
Operating temperature (°C)	10~35				
Power supply (90-264VAC)	QDI-RPZ-FA				
Expected lifetime (hours)	10000				

All solid-state electro-optic Q-switched lasers have the features of high single pulse energy, short pulse duration, and high peak power. These lasers are widely used in applications such as laser distance measurement, laser radar, laser Raman spectroscopy, inductively coupled plasma mass spectrometry (ICP-MS), laser-induced breakdown spectroscopy (LIBS), and various fields of scientific research.

LASER HEAD (RP-D-213-TD)	LASER HEAD	POWER SUPPLY (QDI-RPZ-FA)
 <p data-bbox="264 1133 571 1157">265 (L) × 122 (W) × 100 (H) mm³, 4.0kg</p>	 <p data-bbox="936 1133 1243 1157">228 (L) × 122 (W) × 100 (H) mm³, 4.0kg</p>	 <p data-bbox="1612 1141 1921 1165">270 (L) × 214 (W) × 99 (H) mm³, 3.02 kg</p>

Note:

Specifications subject to change without notice.

- (1) Average power (mW) = Single pulse energy (μJ) × Rep. rate (kHz)
- (2) Average power (mW) = Single pulse energy (μJ) × Rep. rate (kHz)