

FTSS 355-Q

Diode Pumped Passively Q-Switched Solid State Laser

- 355 nm
- Pulsed (≤ 1.1 ns)
- Up to 25 μ J
- Up to 20 kHz
- External and Internal Trigger Mode
- Free Beam or Fiber Coupling



biology · biomedicine · chemistry · analytics

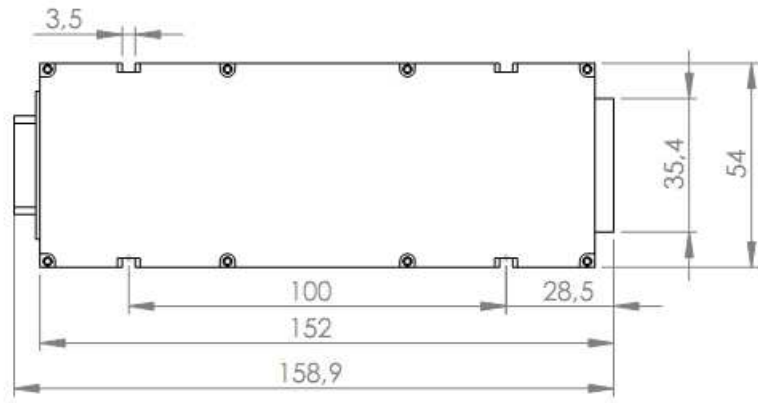
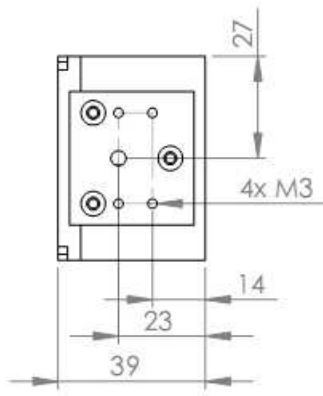
Optical Data		FTSS355-Q1	FTSS355-Q2	FTSS355-Q3
	Wavelength	355 nm		
	Pulse Energy	> 0.3 μ J @ 15 kHz	> 3 μ J @ 10 kHz	> 15 μ J @ 1 kHz
	Peak Power	> 0.25 kW @ 15 kHz	> 2.5 kW @ 10 kHz	> 13 kW @ 1 kHz
	Max. Pulse Repetition Rate	20 kHz	10 kHz	2.5 kHz
	Pulse Width (FWHM)	≤ 1.1 ns		
	Polarization Ratio	> 100:1 vertical		
	Power Stability (%rms, 6 hours) ¹⁾	< ± 5 %	< ± 3 %	< ± 3 %
	Laser Classification	3B / IIIb		
Optical Output	Spatial Mode	TEM ₀₀		
	Beam Divergence (full angle)	< 3 mrad	< 3.5 mrad	< 4 mrad
	Beam Diameter at Output Plane	220 \pm 80 μ m	250 \pm 80 μ m	250 \pm 80 μ m
Electrical Data	Power Consumption mean (max.)	15 W (40 W)	17 W (40 W)	20 W (70 W)
	Operating Voltage (OEM)	12 V DC		
	Line Voltage (with AC-DC adapter)	90 ... 240 V AC		
	Marking	CE		
Interfaces	RS 232 , USB			
	External Trigger (TTL, rising edge) 1 Hz ... max. repetition rate			
	Interface for TTL-control and power monitor			
Miscellaneous	Warm-up Time	< 5 min		
	Operating Temperature	18 ... 38 $^{\circ}$ C		
Options	STAND ALONE Version (incl. key-switch, heat-sink, manual shutter)			
	Synchronization Signal Output (rise time < 2 ns)			
	Fiber Coupling for fiber with core diameter > 70 μ m			
	Manual switch to 532 nm			
	¹⁾ after 5 min warm up, temperature variation ± 3 $^{\circ}$ C and < 3 $^{\circ}$ C/hour			

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Product specifications are subject to change without notice.

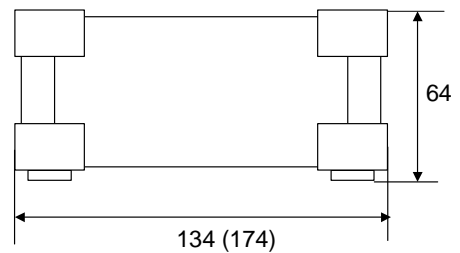
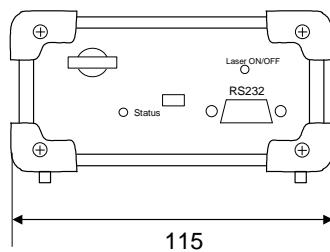
Dimensions

Laser Head: 158.9 x 54 x 39 mm



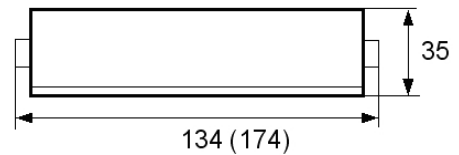
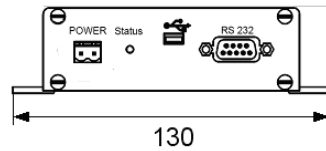
Controller STAND ALONE:

Q1, Q2: 134 x 115 x 64 mm; Q3: 174 x 115 x 64 mm



Controller OEM:

Q1, Q2: 134 x 130 x 35 mm; Q3: 174 x 130 x 35 mm



Laser Safety Labels

The FTSS355-Q lasers are class IIIb/3B according to IEC 60825-1:2007



wavelength: 355 nm max. output: 0.6 μJ pulse duration: <1.1 ns max. repetition rate: 20 kHz Complies with IEC 60825-1:2007 Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001	INVISIBLE LASER RADIATION AVOID EXPOSURE TO BEAM CLASS 3B LASER PRODUCT	LASER RADIATION IS EMITTED FROM THIS APERTURE
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wavelength: 355 nm max. output: 6 μJ pulse duration: <1.1 ns max. repetition rate: 10 kHz Complies with IEC 60825-1:2007 Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001	INVISIBLE LASER RADIATION AVOID EXPOSURE TO BEAM CLASS 3B LASER PRODUCT	LASER RADIATION IS EMITTED FROM THIS APERTURE
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wavelength: 355 nm max. output: 30 μJ pulse duration: <1.1 ns max. repetition rate: 2.5 kHz Complies with IEC 60825-1:2007 Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001	INVISIBLE LASER RADIATION AVOID EXPOSURE TO BEAM CLASS 3B LASER PRODUCT	LASER RADIATION IS EMITTED FROM THIS APERTURE
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Q1 series

Q2 series

Q3 series

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