



BrightLase® System

Applications

- Ideal for pumping Rb
- Pumping of solid state or fiber lasers
- Spectroscopy
- Materials processing: marking, soldering, plastics welding
- Defense: Target Illumination

Features

- 795nm, 808nm, 976nm, 1064 nm, 1380nm, 1470nm and 1532nm
- Operates in either CW or QCW mode
- High spacial brightness
- Optional internal grating for high spectral brightness
- Simple front panel menu driven controls
- LabView™ compatible



Benefits

- Turn key solutions: BrightLase® Laser, driver and power supply
- Long working distance and sharper features for materials processing applications
- High performance from solid state and fiber lasers

	ES-7101-A	ES-7201-A	ES-7301-A	ES-7401-A
Output power	≥35 W	≥30 W	≥35 W	≥10 W
Operating current	<68 A	<55 A	<68 A	< 55A
Operating voltage	<1.9 V	<1.8 V	<1.8 V	< 1.4 V
Center wavelength	795 nm	808 nm	976 nm	1380 nm
Wavelength tolerance	+/-3 nm	+/-3 nm	+/-3 nm	± 10 nm
Spectral width (FWHM)	<3 nm	<3 nm	<5 nm	< 12 nm
Wavelength temperature coefficient	<0.3 nm/°C	<0.3 nm/°C	<0.3 nm/°C	0.3 nm/°C
Fiber core diameter (nominal)	200 μm	400 μm	200 μm	400 μm
Fiber NA (nominal)	0.22	0.15	0.22	0.22
Fiber length	2 m	2 m	2 m	2 m
Fiber output connector	SMA	SMA	SMA	SMA
Module size (L x W x H)	100mm x 41.5mm x 31.5mm	100mm x 41.5mm x 31.5mm	100mm x 41.5mm x 31.5mm	100mm x 41.5mm x 31.5mm
Operating/Test temperature	20° C	20° C	20° C	20° C
Internal thermister	NTC 10K Ω	NTC 10K Ω	NTC 10K Ω	NTC 10K Ω

BRIGHTNESS and POWER
Breaking Performance Barriers through Semiconductor Laser Innovation

QPC Lasers, Inc.

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BrightLase[®] System Electrical Specifications

	Air Cooled		Water Cooled	
	CW	QCW	CW	QCW
Amplitude:				
Output Current	30A	100A @ 30% D.C.	70A	100A @ 70% D.C.
Display Resolution	100mA	100mA	100mA	100mA
Accuracy	2%	2%	2%	2%
Noise	< 200mA _{peak}	< 200mA _{peak}	< 200mA _{peak}	< 200mA _{peak}
Pulse Rate:				
Range	----	0 – 50 kHz	----	0 – 50 kHz
Display Resolution				
(1 Hz)	----	0 – 100 Hz	----	0 – 100 Hz
(10 Hz)	----	100 – 1 kHz	----	100 – 1 kHz
(100 Hz)	----	1 – 50 kHz	----	1 – 50 kHz
Accuracy	----	± 2%	----	± 2%
Pulse Width:				
Range	----	10 μs – 500 ms	----	10 μs – 500 ms
Display Resolution	----	100 ns	----	100 ns
Transition Time	----	5 μs (typ)	----	5 μs (typ)
Trigger In:				
Type	----	Positive edge triggered	----	Positive edge triggered
Signal input	----	TTL or 5V CMOS	----	TTL or 5V CMOS
Minimum Width	----	50 μs	----	50 μs
Input Impedance	----	50 Ω	----	50 Ω
Compliance:				
Compliance Voltage	0 – 350 V	0 – 350 V	0 – 350 V	0 – 350 V
Display Resolution	0.1 V	0.1 V	0.1 V	0.1 V
Accuracy	± 2%	± 2%	± 2%	± 2%
Current Monitor:				
Output Voltage (20A/v)	0 – 5 V	0 – 5 V	0 – 5 V	0 – 5 V
Accuracy	± 2%	± 2%	± 2%	± 2%

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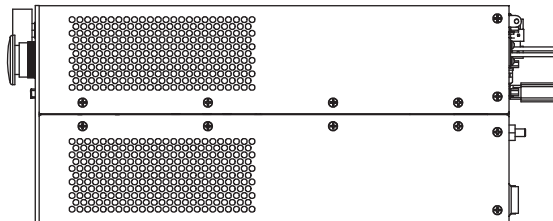
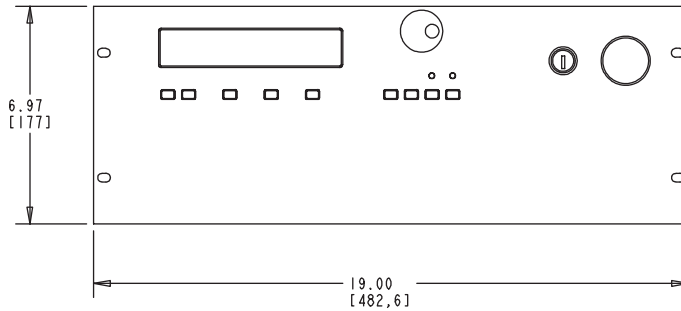
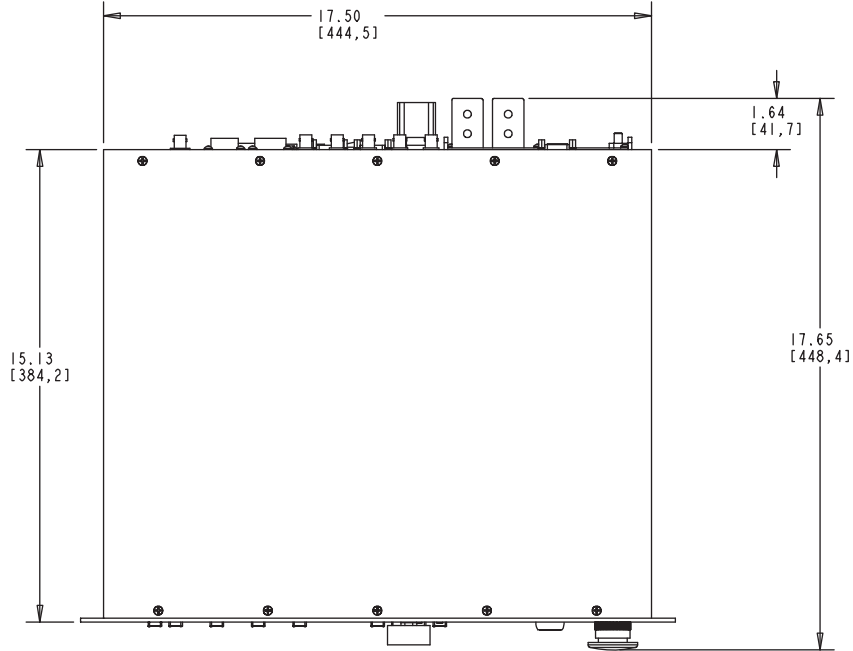
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BrightLase[®] System Mechanical



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光技術をサポートする

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