



Internal Gratings System

Applications

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

Features

- 808nm and 976nm
- Operates in either CW or QCW mode
- High spatial brightness
- Simple front panel menu driven controls
- LabView™ compatible



Benefits

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

	ES-7202	ES-7302
Output power	≥ 25 W	≥ 20 W
Operating current	< 44 A	< 48 A
Operating voltage	< 2.0 V	< 1.7 V
Center wavelength	808 nm	976 nm
Wavelength tolerance	+/-1.0 nm	+/-1.5 nm
Spectral width (FWHM)	< 0.5 nm	< 0.7 nm
Wavelength temperature coefficient	< 0.07 nm/°C	< 0.1 nm/°C
Fiber core diameter (nominal)	400 μm	200 μm
Fiber NA (nominal)	0.22	0.22
Fiber length	1 m	2 m
Fiber output connector	SMA	SMA
Module size (L x W x H)	100mm x 41.5mm x 31.5mm	100mm x 41.5mm x 31.5mm
Operating Temperature	20 °C	20 °C

BRIGHTNESS and POWER
Breaking Performance Barriers through Semiconductor Laser Innovation

QPC Lasers, Inc.

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Internal Gratings 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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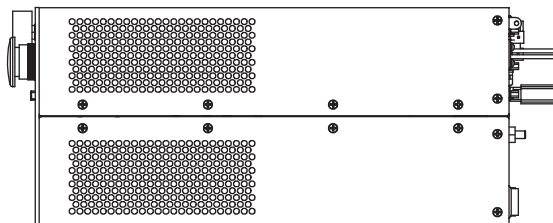
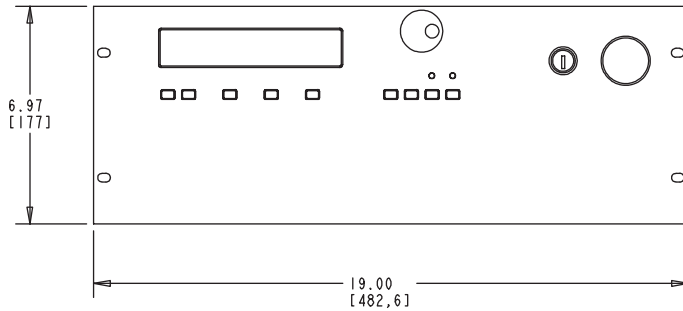
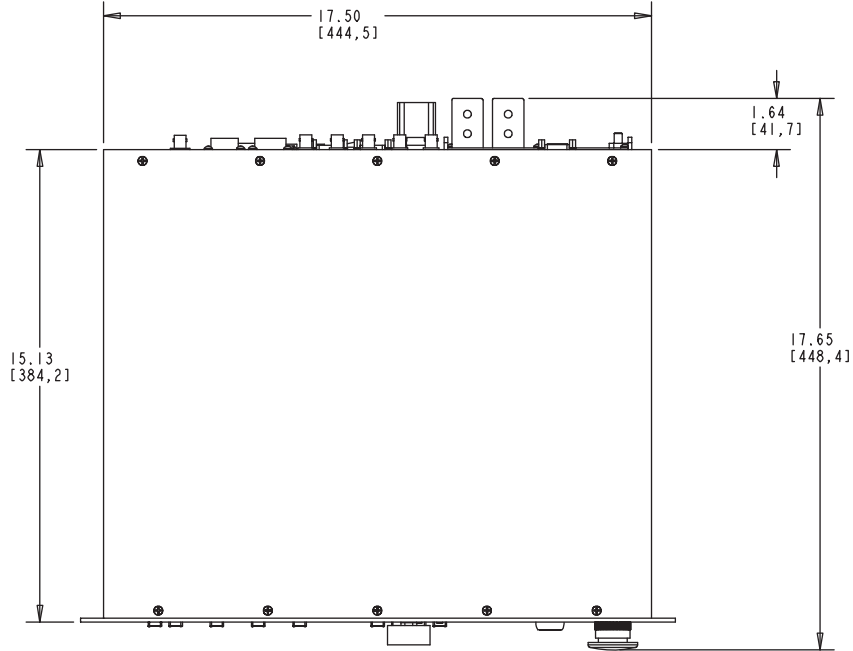
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Internal Gratings System Mechanical



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株式会社オプトサイエンス
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