



Features

- Extensive laser diode protection features
- High set-point accuracy and voltage measurement accuracy
- On-board data storage for fast LIV data gathering and transfer
- Integrated photodiode measurement
- Integrated thermistor-based temperature measurement
- Low output noise
- GPIB Interface



Applications

- Research and Development with High Power Laser Diodes

Model Number	9000-0001	9000-0002	9000-0003	9000-0004
Drive Current Output				
Output Current Range - CW	50 A	85 A	70 A	125 A
Output Current Range - QCW	100 A	170 A	160 A	220 A
Output Current Range - H Pulse	50 A	85 A	70 A	125 A
Settling Time	20 μ s	20 μ s	20 μ s	20 μ s
Maximum CW Power	600 W	1020 W	2100 W	3000 W
Compliance Voltage	12 V	12 V	30 V	24 V
QCW Mode				
Pulse Width - Range, Pulse Mode	40 μ m to 1 ms	40 μ m to 1 ms	40 μ m to 1 ms	40 μ m to 1 ms
Pulse Width - Range, H Pulse Mode	1 ms to 2 s	1 ms to 2 s	1 ms to 2 s	1 ms to 2 s
Pulse Width - Resolution, Pulse Mode	1 μ s	1 μ s	1 μ s	1 μ s
Pulse Width - Resolution, H Pulse Mode	\pm 0.01% +0.5 μ s	\pm 0.01% +0.5 μ s	\pm 0.01% +0.5 μ s	\pm 0.01% +0.5 μ s
Pulse Width - Accuracy, Pulse Mode	\pm 1 μ s	\pm 1 μ s	\pm 1 μ s	\pm 1 μ s
Pulse Width - Accuracy, H Pulse Mode	\pm 1% +0.05 ms	\pm 1% +0.05 ms	\pm 1% +0.05 ms	\pm 1% +0.05 ms
Pulse Frequency - Range	1 to 1000 Hz	1 to 1000 Hz	1 to 1000 Hz	1 to 1000 Hz
Pulse Frequency - Resolution	0.1 Hz	0.1 Hz	0.1 Hz	0.1 Hz
Duty Cycle - Pulse Mode	0.1 to 20%	0.1 to 20%	0.5 to 20%	0.5 to 20%
Duty Cycle - H Pulse Mode	20 to 100%	20 to 100%	20 to 100%	20 to 100%
Resolution	0.001	0.001		
Rise/Fall Time	<10 μ s	<15 μ s	<15 μ s	<15 μ s
Overshoot	<5%	<5%	<5%	<5%
Event TRIGGERing				
Trigger Output - Pulse Width	\leq 10			
Trigger Output - Delay	Programmable			
General				
GPIB Interface	IEEE488/GPIB	IEEE488/GPIB	IEEE488/GPIB	IEEE488/GPIB
Power Requirements	100-240VAC \pm 10%	100-240VAC \pm 10%	100-240VAC \pm 10%	220-240VAC \pm 10%
Size (HxWxD)	146mm x 483mm x 451mm	146mm x 483mm x 451mm	146mm x 483mm x 451mm	146mm x 483mm x 451mm
Weight	13.6 kg (30 lbs)	15.4 kg (34 lbs)	16.3 kg (36 lbs)	18.6 kg (41 lbs)
Regulatory Compliance	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS

Warning: Class 4 Laser, Invisible Laser Radiation – Avoid Eye or Skin Exposure to Direct or Scattered Radiation.

Laser Operations LLC



Output Current (125 Amps CW, 220A QCW) and Voltage (70V) Display

Temperature Monitor, Pulse Parameters (Pulse Width, DC, Frequency)



Pulse Trigger Input/Output

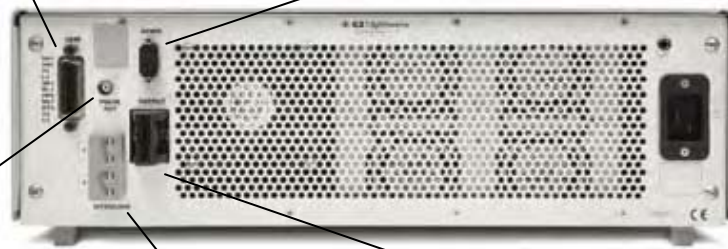
QCW Mode: Adjustable Pulse-Width, Duty Cycle and Frequency

Adjustable I and V Limits

Adjustable PD Bias

GPIB Connector

Thermistor, PD and Voltage Measurement Inputs



Pulse Output

Safety Interlocks

Current Output Connector

BRIGHTNESS and POWER

Breaking Performance Barriers through Semiconductor Laser Innovation

Laser Operations LLC

15632 Roxford Street • Sylmar, CA 91342 • Phone + 1(818) 986-0000 • Fax: +1(818) 698-0428
www.QPCLasers.com • email: info@QPCLasers.com