

DESIGNED FOR CW APPLICATIONS



1KW Configuration

Features and Benefits

- Dual Control - CW Laser & Thermo-electric Drive
- Power Factor Correction (PFC) and High Efficiency Operation
- Micro Controller System
- RoHS Compliant
- USB 2.0 Interface
- Universal Single Phase Input for Worldwide Operation
- 1 KW Combined Power Output (2:1 typical Outputs)
- Aiming Beam Support

Dual Control CW Laser Diode Driver & Thermoelectric Cooler (TEC) Controller

4000 Series Specifications

Input

Voltage

Universal 100-240 VAC
Single Phase, Nominal

Current

<10 Amps

Frequency

50/60 Hertz, Nominal

Power Factor Correction

0.99 Typical

Leakage

< 3.5 mA @ 264 ~ 50 Hz

Laser Output

Drive Type

CW Output
300 Watt Output

Voltage

30 VDC Maximum
0.1 VDC Resolution

Current

0-10 Amps
0.1 Amp Resolution

Current Ramp

1Amp/100mSec

Operating Modes

Current Controlled
Light Controlled
External Controlled

TEC Controller Output

Drive Type

Bi-Directional, Two Sensors
Microcontroller PID Loop
600 Watt Output

Voltage

30 VDC Maximum
0.1 VDC Resolution

Current

20 Amps
0.1 Amp Resolution

Temperature

Stability +/- 0.5%
Resolution 0.1 ° C

Thermistor / Sensor

5K, 10K and 30K

Aiming Beam Output

Voltage and Current

5 VDC
0-50 mA

Control Interface

USB 2.0

Environmental

Operational Temperature

10 to 40 ° C, Ambient

Storage Temperature

-40 to 60 ° C

Cooling

Internal Fan
1" Clearance

Mechanical

Dimensions

11.000" x 8.375" x 4.500"
3U Half-Rack

Features

RoHS Compliant

Power Factor Correction

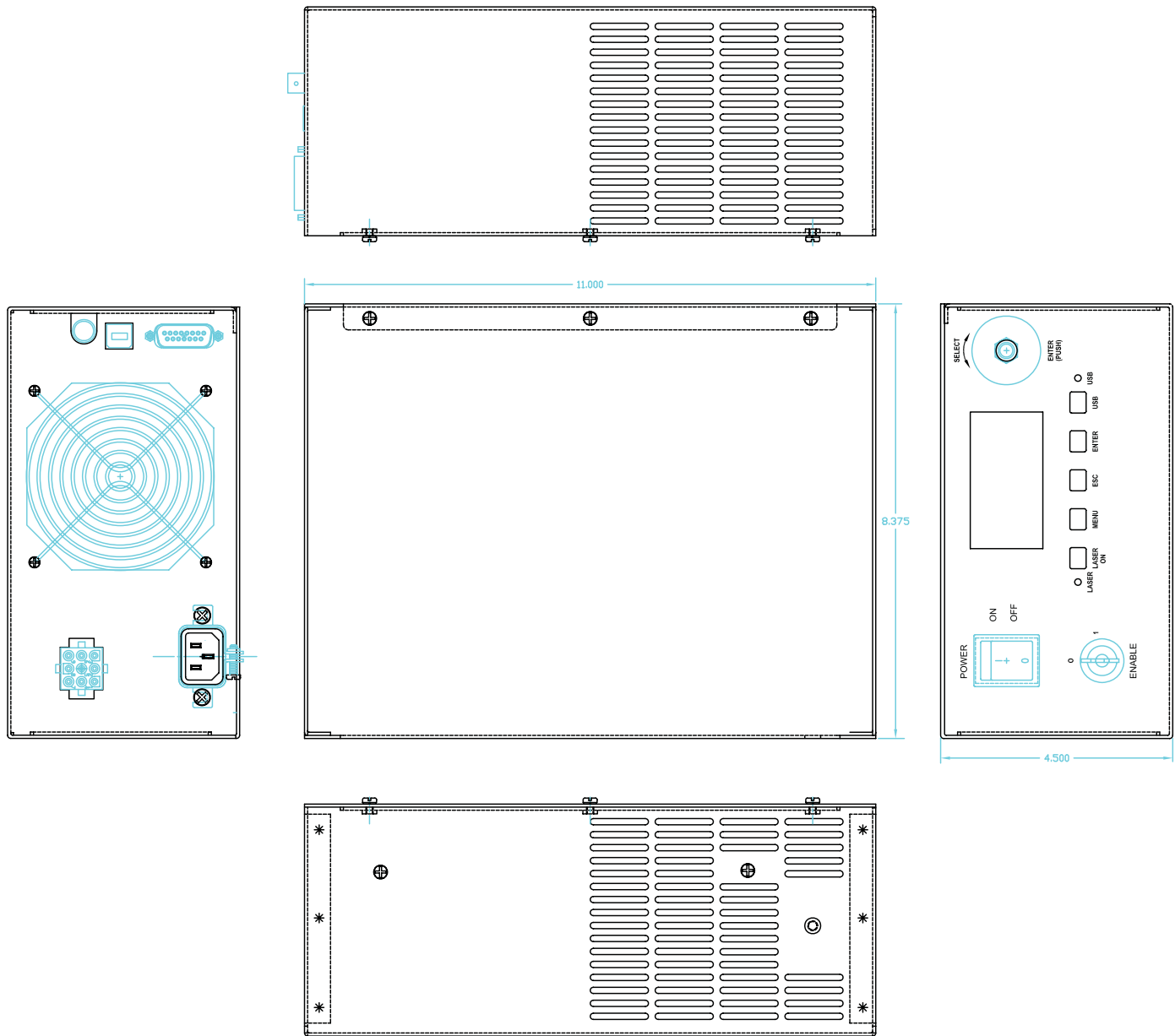
Universal Line Input (Automatic)

Diode Protection

Aiming Beam Output



1KW LASER DIODE DRIVER AND TEC CONTROLLER



Drive Enclosure

Dimensions in inches except where indicated

Safety and Operating Considerations

CAUTION - The laser light emitted from laser diodes may be invisible and could cause injury. Follow all necessary safety precautions when operating any laser.

Variations*

The output combination represented is representative only and other output combinations are available for this model.



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