



600 W

MEDICAL LASER POWER SUPPLY



TABLE OF CONTENTS

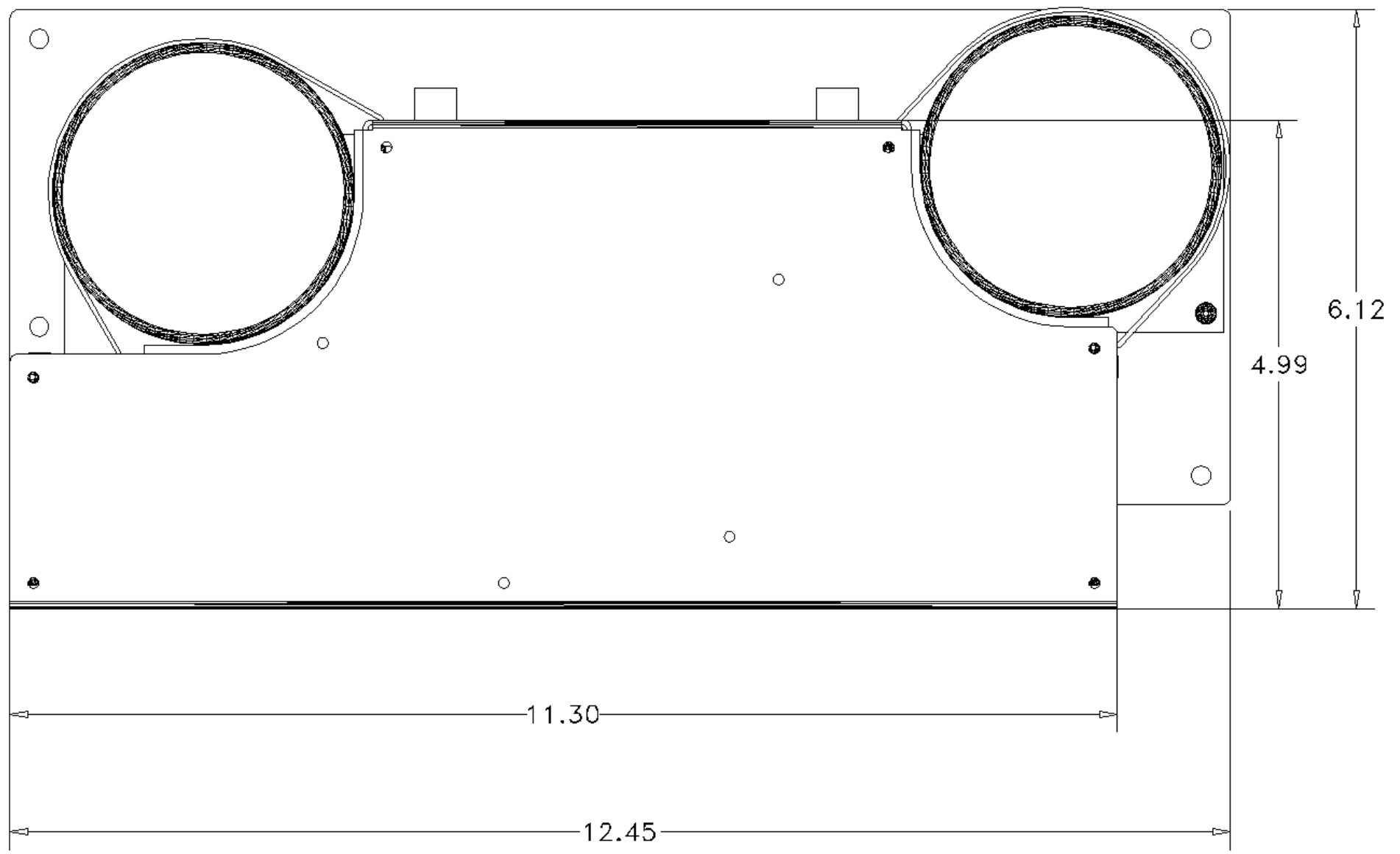
1. Introduction	2-18
2. Inrush Current	19
3. Start Up Delay	20
4. Output Voltage Rise / Fall Characteristics	21
5. Power Fail / Hold-up / Dropout	22
6. Leakage Current	23
7. Line Conducted EMI	24 - 27
9. Line Current Harmonics	28 - 29
9. Output Control Loop	30 - 34
10. Differential Mode Output Ripple and Noise	35 - 39
11. Common Mode Output Ripple and Noise	40 - 41
12. Regulation	42
13. PFC AC Input Undervoltage / HVDC Overvoltage Protection	43
14. Output Overvoltage / Overcurrent Protection	44 - 45
15. Laser Output Characteristic	46 - 47
16. Power Factor and Efficiency	48 - 49
17. Temperature Measurements	50 - 53
18. Automated Test Result	54
19. Typical Performance Summary	55



PS2303 POWER SUPPLY FEATURES

Input Power:	90 - 264 Vac, 47 - 63 Hz, 6A Max (with Active Power Factor correction)
Inrush Current:	Limited by passive inrush current protection to < 70A peak @ 230 Vac
Input Connector :	Flying leads with "Fast On" connectors
Output Connector:	Amp 2-520407-2, 31890
Output Power:	600 W; DC Outputs: 5.1V @ 2.5A, 16.5V @ 22A, 12V @ 0.3A, -12V @ 0.3A & 2X 70V @ 50A (pulsed laser output)
Nominal Size:	5.0" x 6.1" x 12.4"
Weight:	12.5 lbs. (5.67 kg.)
Temperature Range:	Operating: 0 to 40° C
Cooling:	Internal fan
I/O Signals:	Customer specific Analog/Digital Interface
Construction:	Enclosed steel chassis.
Protections:	AC Input undervoltage protection. HVDC overvoltage detection. Primary power limiting. Latching type protections on outputs, unlatchable via cycling of AC power or remote shut down, overvoltage, overcurrent, overtemperature.
Power Circuits:	60 kHz power factor correcting boost primary supply. Two 125 kHz two transistor forward down converters for DC power supply and Laser power supply.
Standard Conditions:	Standard Input: 115 Vac, 60 Hz Standard Load (385W); 5.1V @ 2.5A, 16.5V @ 22A, +12V @ 0.3A, -12V @ 0.3A Laser outputs at 50A, 30 ms pulse width and 1 second period Minimum Load (22W); 5.1V @ 1A, 16.5V @ 1A, +12V @ 0A, -12V @ 0A

MECHANICAL OUTLINE



MECHANICAL OUTLINE



ISOMETRIC VIEW

