Power Supply

Model VPS-400US/48

Listings/Approvals:
UL, FM

The VESDA LaserPLUS power supply, model VPS-400US/48, is configured for telecommunication applications and requires a 48 VDC uninterruptable power source that serves as both the primary and back-up power source for the VESDA LaserPLUS system.

The VESDA LaserPLUS power supply, model VPS-400US/48, is a multiple zone switching power supply. The VPS-400US/48 is capable of providing power to one, two, three or four VESDA LaserPLUS detectors fitted with a display. Alternatively, the VESDA LaserPLUS power supply, model VPS-400US/48, is capable of providing power for one to 20 VESDA LaserPLUS remote displays fitted with relays.

Installation of the VESDA Power Supply, Model VPS-400US/48

The VESDA LaserPLUS power supply, model VPS-400US/48, converts 48 VDC to 24 VDC power via a low dissipative stabilizer that uses pulse width modulation to control the output voltage.

The VPS-400US/48 should be installed in accordance with the National Electrical Code, NFPA 72, and in accordance with any local regulations. See wiring diagrams for proper hookup.

Components

The VESDA LaserPLUS power supply, model VPS-400US/48, consists of four major components: the mounting enclosure, the switching power supply, the 3A slow - acting type output fuse and two screw terminal barrier strips (input and output).

FEATURES

- Input 48 VDC + or -
- 2.5 amp continuous supply current at 24 VDC
- "Power - OK" Led
- Overvoltage protection
- Rectangular current limiting
- Built-in Emi filter
- Meets conducted noise standard of Mil - Std 461B
- Input and output connections are via screw terminal barrier strip

POWER SUPPLY Specifications

Input:
Nominal Input Voltage: 48VDC
Input Voltage Range: 40 to 56 VDC
Input Fuse Rating: Internal,
Slow-acting, 4.0A - 250 volts
Input Current: 1.6A DC typical,
1.7A DC maximum

Output:
Nominal Output Voltage: 24VDC
Adjustable Output Voltage Range:
16.8 - 26.4 VDC
Output Current: 2.5A DC @ 86°F (30°C)
Switching component ripple, P-P:
50 mV typical, 100 mV maximum

Dimensions:
13.8 in. x 8.9 in. x 4.9 in.
(350 mm x 225 mm x 125 mm)

Weight:
8 lbs. (3.6 kg.)

Operating Temperature:
Ambient: 32° to 160°F (0° to 71°C)

Humidity:
10 - 95%RH, non-condensing

EMI:
Mil-Std-461, Method CEO3
Mil-Std-461, Method REO3

Cable Access:
One inch (25 millimeters)
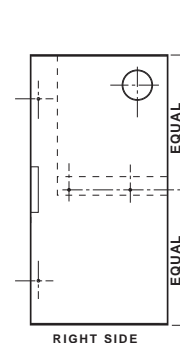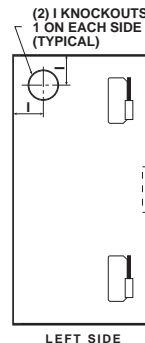knockouts in various positions
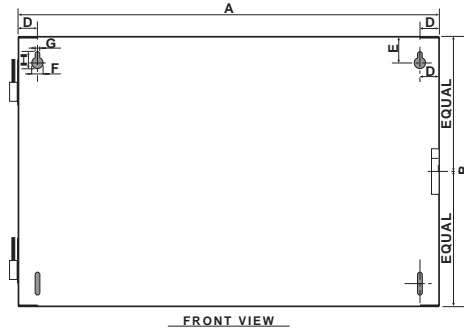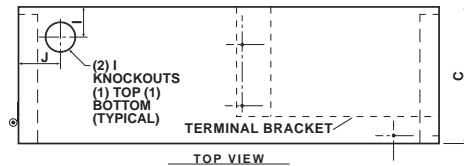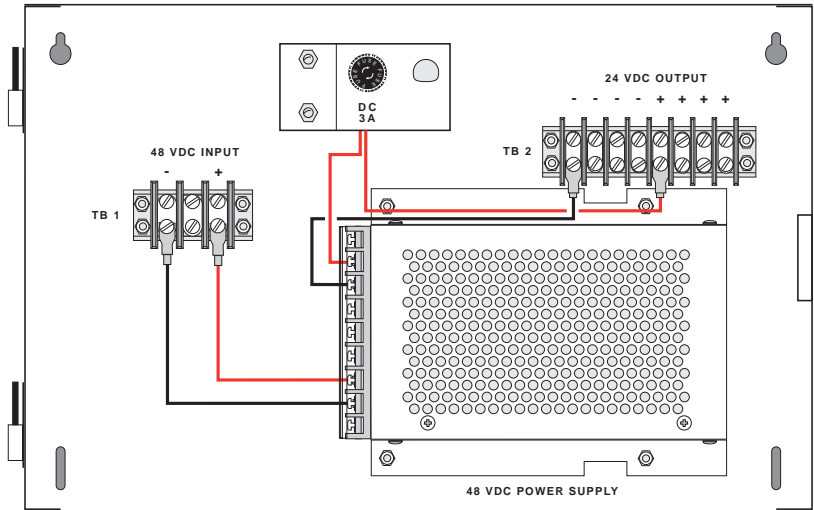
Cable Termination:
Screw terminal blocks,
30-12 AWG (0.2-2.5 mm)

Ordering Information:
VPS-400US/48

Additional Datasheets:
Technical Overview
Scanner Detector
Display Module
VESDA System Management (VSM™)
Programmer Module
Detector

48 VDC POWER SUPPLY

TOP VIEW

FRONT VIEW

LEFT SIDE   RIGHT SIDE

Dimensions	
	in
A	13.750
B	8.875
C	4.500
D	.625
E	.875
F	.375
G	.1875
H	.687
I	1.000
J	1.375