

DC Converter Kit

Model: 48-12-1i

INSTALLATION / OPERATION INSTRUCTIONS

General Description

If you intend to power from a -48 VDC source **AND** monitor -48 VDC when powering the SPM-200, input power must come from an isolated DC Converter. This kit contains a suitable DC Converter and mounting bracket options.

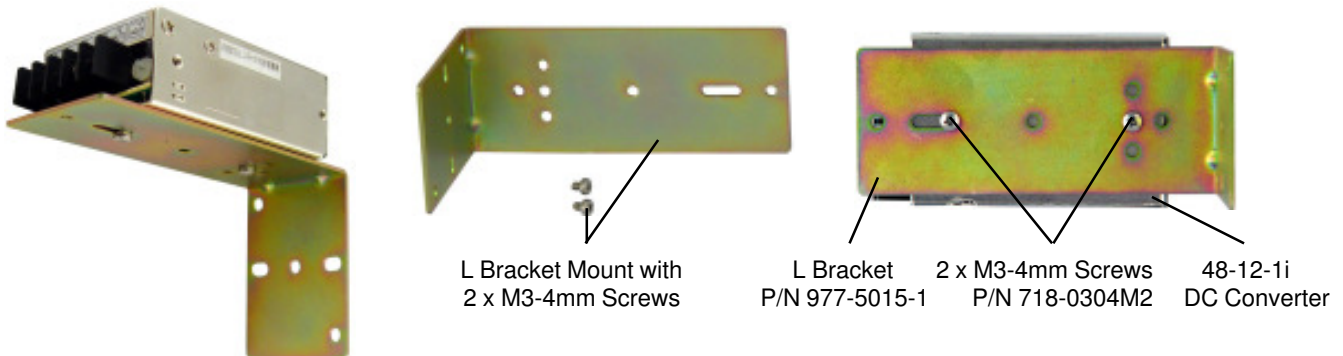
Mounting

There are two mounting options for this converter:

- 1) L Bracket (included in kit) - for any horizontal / vertical surface
- 2) DIN-Rail bracket (included in kit)

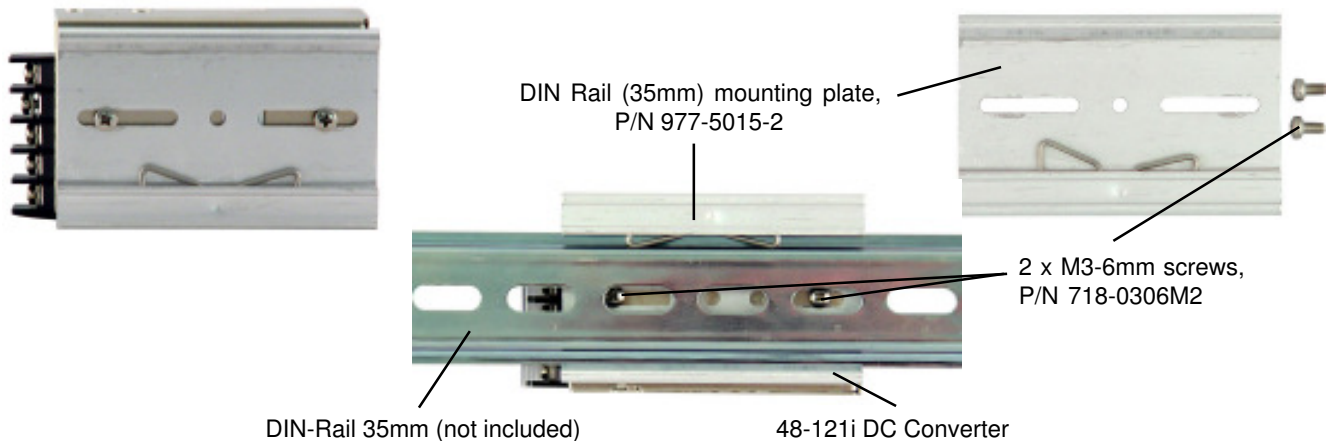
Mounting

1) L Bracket



1) Mount the bracket to the converter using the M3-4mm x 2 screws; **DO NOT USE** the longer 6mm screws as this will damage the converter. 2) Now you can mount the converter and bracket to desired location. Hardware not supplied.

2) DIN-Rail

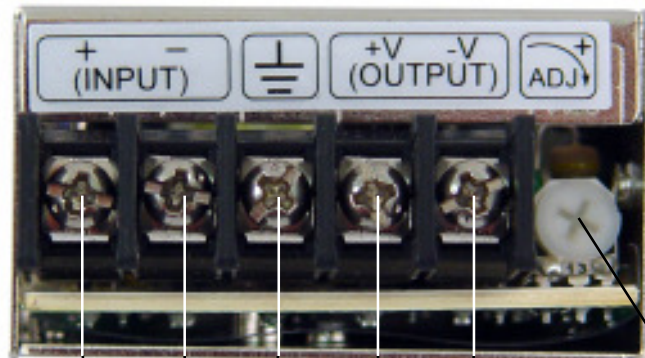


Use the M3-6mm screws to secure the DIN-Rail mounting plate to the side of the 48-12-1i converter. The mounting plate is slotted for adjusting its position, slide the DIN-Rail plate onto the DIN-Rail plate.

M-48-12-1i
As of January 2010

Wiring

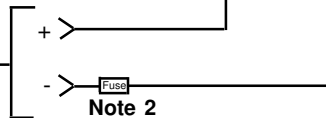
48-12-1i DC Converter



Note 1: Chassis is Floating. Terminal block ground screw is only connection to chassis. Connect to system ground.

Output Voltage Adjustment
Range: 10.8-13.2 VDC
Preset to: 12 VDC

Input: 36-72
VDC Source
(0.45 Amps @
48 VDC)



Note 1

12 VDC Output to
SPM-200 Terminals
19 (-) & 20 (+) or to
12 VDC Load
(1.2 Amps Max.)

Note 2: Fuse hot side of input for wiring protection (fuse shown on negative input on a -48VDC input source).

Specifications

Input: 36 to 72 VDC, 0.45 amp draw @ 48 VDC

Output: 12.0 VDC @ 1.25 amps max.

Ripple & Noise: 125 mV p-p

Line/Load Regulation: +/- 0.3%

Efficiency: 79%

Operating Temperature: -10°C to +60°C, 100% @ 40°C;

Derate linearly from 100% @ 40°C to 60% @ 60°C (Horizontal Mount)

Protections:

- Overload
- EMI Conduction & Radiation: Compliance to EN55022, Class B
- EMS Immunity: EN61000-4, -2, 3, 4, 6, 8
ENV50204