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

![Image of L Bracket Mount with 2 x M3-4mm Screws and L Bracket with 2 x M3-4mm Screws]

- L Bracket Mount with 2 x M3-4mm Screws
- L Bracket 2 x M3-4mm Screws
- P/N 977-5015-1
- P/N 718-0304M2
- 48-12-1i DC Converter

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

![Image of DIN-Rail and 48-12-1i DC Converter]

- DIN Rail (35mm) mounting plate, P/N 977-5015-2
- 2 x M3-6mm screws, P/N 718-0306M2
- DIN-Rail 35mm (not included)
- 48-12i DC Converter

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
**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)

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

**Wiring**

**48-12-1i DC Converter**

---

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

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