

POE240 Power Supply/Charger Board

Overview:

Altronix POE240 provides 240W for NetWay Spectrum switches with 1Gb SFP ports. It converts 115VAC, 60Hz or 230VAC, 50/60Hz input into a 56VDC at 4.5A of continuous supply current (see specifications). It also features a built-in charger for LiFePO_A (Lithium Iron Phosphate), sealed lead acid or gel type batteries.

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Fig. 1

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To Input of

the device

to be powered

To 24V Stand-by

Batteries

Specifications:

Input:

• 115VAC, 60Hz, 2.5A or 230VAC, 50/60Hz, 1.3A.

Output:

- 56VDC/240W output.
- 4.25A continuous supply current.
- Filtered and electronically regulated output.
- Short circuit and thermal overload protection.

Battery Backup:

- 24VDC charging circuit charges LiFePO4 (Lithium Iron Phosphate) or sealed lead acid* or gel type* batteries.
- Automatic switch over to stand-by battery when AC fails.
- Includes battery leads.

Environmental:

Operating Temperature (De-Rating):

240W: - 30°C to 55°C (- 22°F to 131F).

180W: -30°C to 65°C (-22°F to 149°F). **150W:** -30°C to 75°C (-22°F to 167°F).

Storage Temperature: - 30°C to 85°C (- 22°F to 185°F).

Relative Humidity: 85% + /- 5%.

Board Dimensions (L x W x H approx.): 7.75" x 4.5" x 1.375" (196.9mm x 114.3mm x 34.9mm).

Installation Instructions:

POE240 should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

115/230VAC

Input

- 1. Mount POE240 in the desired location/enclosure (mounting hardware included).
- Pay attention to correct positioning of the board, depending on Altronix product being serviced. Mounting hardware included.
- 2. Connect AC power from overcurrent protective device circuit breaker (20A @ 115VAC, 60Hz, 16A @ 230VAC, 50/60Hz) to the terminals marked [L, N] on power supply board (Fig. 1). Use 14AWG or larger for all power connections (Battery, DC output, AC input).

Keep power-limited wiring separate from non power-limited wiring (115VAC/230VAC 50/60Hz Input, Battery Wires). Minimum 0.25" spacing must be provided.

CAUTION: Do not touch exposed metal parts. Shut branch circuit power before installing or servicing equipment. There are no user serviceable parts on unit. Refer installation and servicing to qualified service personnel.

- 3. Measure output voltage before connecting devices. This helps avoiding potential damage.
- 4. Connect devices to be powered to the terminals marked [- DC 56V +].
- 5. When the use of stand-by batteries is desired, they must be LiFePO₄ sealed lead acid or gel type. Connect two (2) 12VDC batteries wired in series or one (1) 24V battery to terminals marked [– BAT +] (*Fig.* 1), carefully observing polarity (battery leads are included). When batteries are not used, a loss of AC will result in the loss of output voltage.

Note: When using two 12V LiFePO₁ (lithium iron phosphate) batteries, check with manufacturer specifications that batteries can be connected in series.

Terminal Identification:

Terminal Legend	Function/Description
L, G, N	Connect 115VAC/230VAC to these terminals: L to Hot, N to Neutral.
- DC 56V +	56VDC @ 4.5A continuous supply current.
- BAT 24V +	Stand-by battery connections.

