OMNITERM PAF POWER SUPPLY



Model C2440A PAF Universal Input 24Vdc 0.25A Output Instrument Power Supply

DATASHEET

- 24Vdc Instrument Power Supply
- Universal AC and DC Input Voltage range
- Space efficient 22.5mm wide module
- DIN Rail or Surface mounting
- CE Certified
- High Reliability Industrial Grade Design
- Fully enclosed housing



OVERVIEW

The OMNITERM PAF Instrument Power Supply is a general purpose dc supply suitable for a range of industrial instrumentation applications, such as the powering of instrument loops in small numbers, where space and reliability are of concern.

Use of carefully selected long-life components combined with conservative design parameters ensures increased reliability even in harsh operating conditions.

The PAF supply forms part of the OMNITERM range of Industrial instrumentation, and is designed to be compatible with all of the products in this range.

This second generation power supply uses the latest switch-mode supply technology to reduce cost, increase reliability, and meet international safety and compatibility norms.

This second-generation product utilises advanced electronic techniques to achieve high accuracy with minimum loop losses and zero field calibration.

The narrow 22.5mm plastic housing allows the product to be conveniently mounted together with other DIN rail mount instrumentation.

Electrical Connections

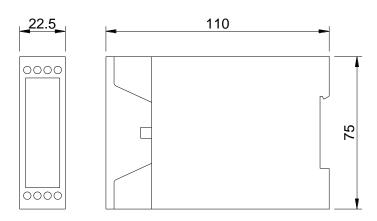


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Mechanical Details



SPECIFICATIONS

Unpacked

| Input | | |
|--|----------------------------------|----------------------------------|
| AC Input Voltage Range | 85-264Vac | |
| AC Input Frequency | 47-63 Hz | |
| DC Input Voltage Range | 100-250Vdc | |
| Input Supply Current at 115Vac | <0.15A | |
| Input Supply Current at 230Vac | <0.1A | |
| Switch-on inrush current | <1A (50Hz half cycle duration) | |
| Output | | |
| Model | C2440A-0 | C2440A-1 |
| Output Voltage at full load | $24 \text{Vdc} \pm 0.5 \text{V}$ | $12 \text{Vdc} \pm 0.5 \text{V}$ |
| Rated Output Current | 0.25A maximum | 0.5A maximum |
| Overload Protection | Power Limited Output | |
| Output Ripple at Full Load | 2% maximum peak-to-peak | |
| AC Line Regulation over 85-264Vac input range | 2% max | |
| DC Line Regulation over 100-250Vdc input range | 2% max | |
| Load Regulation over 10-100% load range | 1% | |
| Temperature Stability | < 0.15% / °C | |
| Environment | | |
| Operating | 0 to +60°C | |
| Storage | -20 to +70°C | |
| Weight | | |
| | | |

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|----------------------------------|---|--|
| Packed | 155g approx. | |
| Compliance to Standards | | |
| Safety | EN 60950:1995, IEC950 | |
| Emissions | EN55011 and EN50081-2:1994 Group I, Class A | |
| Immunity – ESD | IEC 61000-4-2:1995, level 3 | |
| Immunity – RF Fields | IEC 61000-4-3:1995, level 3 | |
| Immunity – Fast Transients | IEC 61000-4-4:1995 2 kV – DC power port | |
| Functional Safety to IEC61508 | Suitable for use in SIL1 Applications. See Separate Reliability Datasheet RDC2440 | |
| Housing | | |
| Width | 22.5mm (1.18") | |
| Height | 75mm(2.95") | |
| Depth (from panel) | 110mm(4.33") | |
| Material | ABS Flammability Class HB as per UL94 | |
| Ordering Information | | |
| Order Code | <u>Description</u> | |
| C2440A-0 | Omniterm PAF 24Vdc Power Supply Module | |
| C2440A-1 | Omniterm PAF 12Vdc Power Supply Module | |
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130g approx.

