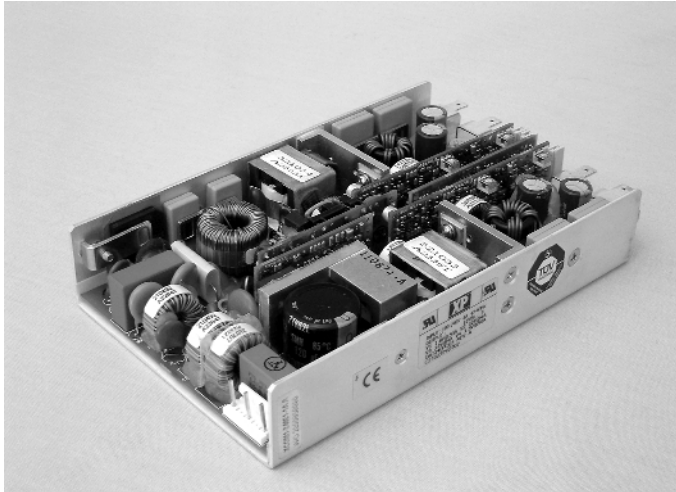


# AC/DC U-Channel

## 240 Watts DAT240 Series

**XPiQ inc.**

Intelligent Design Quality Product



Two High Current Low Voltage Outputs

•  
Four Outputs with Low Voltages  
Down to 1.5 V

•  
Current Sharing On All Outputs

•  
Meets 1U, Low Profile Requirements

•  
Meets EN61000-3-2, -3

•  
International Safety Approvals & CE Mark

## Specification

### Input

- Input Voltage • 85-264 VAC
- Input Frequency • 47-63 Hz
- Power Factor • 0.99 at full line and nominal load
- Inrush Current • 30 A max at 115 VAC, 40 A max at 230 VAC
- Input Current • 3 A max at 115 VAC, 2 A max at 230 VAC
- Remote On/Off • On = Logic Low, or short circuit  
Off = Logic high, or open circuit

### Output

- Output Voltage • See Table
- Output Voltage Adjustment •  $\pm 0.25$  V on all outputs
- Output Power • 240 Watts
- Minimum Load • 0 minimum load required
- Line/Load Regulation •  $\pm 0.2\%/\pm 2\%$  maximum
- Ripple & Noise •  $\pm 1\%$  or 50mV pk-pk
- Transient Response • 1% max deviation 500  $\mu$ s recovery time for a 90% load change
- Hold-up Time • >10 ms at 85 VAC
- Overvoltage Protection • All outputs 125% to 135% of nominal, recycle input to reset
- Overcurrent Protection • All outputs protected to overload or short circuit conditions, auto restart
- Overtemperature Protection • Standard with auto recovery
- Remote Sense • Compensates for up to 3% loss
- Current Share • Single wire,  $\pm 10\%$  on all outputs

### General

- Efficiency • 80% typical
- Switching Frequency • 150 KHz nominal
- Power Density • 5.6 W/in<sup>3</sup>
- MTBF • 377,000 hrs minimum
- Isolation Voltage • 3000 VAC Input to Output  
1500 VAC Input to Ground  
500 VAC Output to Ground
- Signals • Power fail detect - Fail = TTL low  
DC OK - TTL low when any output drops below 5% of nominal
- Size • 4.50" x 7.00" x 1.35"
- Weight • 800 grams.

### Environmental

- Operating Temperature • 0° C to +50 °C
- Cooling • 300 LFM required for full power from 0 °C to +50 °C
- Temperature Coefficient •  $\pm 0.05\%/^{\circ}$ C
- Humidity • 5 to 95% RH, non condensing
- Storage Temperature • -20 °C to + 85 °C
- Shock & Vibration • MIL STD-810F

### EMC & Safety

- Safety Approvals • UL60950, CSA 60950 per cUL, EN60950, CE Mark LVD
- EMI/EMC • Meets EN61000-3-2, -3  
EN55022/CISPR22 Class B & FCC Level B conducted
- Immunity and Surge • Meets EN61000-4-2, -3, -4, -5

# OUTPUT VOLTAGE & CURRENT RATINGS

**DAT240**

Outputs	Output Voltage	Output Current	Regulation		Ripple & Noise	Model Number
			Line	Load		
V1 V2 V3 V4	3.3 V 5.0 V 12.0 V 2.5 V	50 A 5 A 4 A 50 A	±0.2% ±0.2% ±0.2% ±0.2%	±1.0% ±2.0% ±2.0% ±1.0%	1% or 50 mV pk-pk	DAT240PQ01
V1 V2 V3 V4	3.3 V 5.0 V 12.0 V 1.7 V	50 A 5 A 4 A 50 A	±0.2% ±0.2% ±0.2% ±0.2%	±1.0% ±2.0% ±2.0% ±1.0%	1% or 50 mV pk-pk	DAT240PQ02
V1 V2 V3 V4	1.8 V 5.0 V 12.0 V 3.3 V	50 A 5 A 4 A 50 A	±0.2% ±0.2% ±0.2% ±0.2%	±1.0% ±2.0% ±2.0% ±1.0%	1% or 50 mV pk-pk	DAT240PQ03
V1 V2 V3 V4	1.8 V 12.0 V 12.0 V 2.5 V	50 A 4 A 4 A 50 A	±0.2% ±0.2% ±0.2% ±0.2%	±1.0% ±2.0% ±2.0% ±1.0%	1% or 50 mV pk-pk	DAT240PQ04
V1 V2 V3 V4	1.8 V 12.0 V 12.0 V 1.5 V	50 A 4 A 4 A 50 A	±0.2% ±0.2% ±0.2% ±0.2%	±1.0% ±2.0% ±2.0% ±1.0%	1% or 50 mV pk-pk	DAT240PQ05
V1 V2 V3 V4	3.3 V 5.0 V 12.0 V 5.0 V	50 A 5 A 4 A 25 A	±0.2% ±0.2% ±0.2% ±0.2%	±1.0% ±2.0% ±2.0% ±1.0%	1% or 50 mV pk-pk	DAT240PQ06

## Mechanical Details

Dimensions in inches (mm).

Pin No.	J1	J2	J3
1	-V2	+RS V1	-V3
2	-V2	-RS V1	-V3
3	-V2	+RS V4	-V3
4	+V2	-RS V4	+V3
5	+V2	V1 Current Share	+V3
6	+V2	V4 Current Share	+V3
7	V2 Current Share	Power Fail	V3 Current Share
8	-RS V2	DC-OK	-RS V3
9	+RS V2	Remote On/Off	+RS V3

Mating Connector is Molex 22-43-3090 or 50-37-5093

To turn output on, Remote ON/OFF Pin must be shorted to -V1

See XPiQ website for detailed specifications and applications notes.