

# UMEC International Corporation

## UP2002R-02

### 200 Watts Power Dual Output Open Frame Switchers

- ◆ 3.5"x 6.39"x 1.59" Open Frame
- ◆ Active Power Factor Correction for IEC 1000-3-2 Compliance
- ◆ Over Current, Voltage Protection
- ◆ Input Under Voltage Lockout
- ◆ Build-in 40X40X10 FAN (Option)
- ◆ Build-in OR-ing Diode for Redundant (Option)
- ◆ RoHS Compliant



### SPECIFICATIONS

All specifications are typical at nominal line, full load and 25°C unless otherwise noted.

### INPUT SPECIFICATIONS

Input Voltage Range..... 85-264VAC  
Input Frequency ..... 47-63 Hz  
Input Current <sup>1</sup> ..... 3.3Arms, max  
Inrush Current ..... 50A max.(230 Vac Cold Start)  
..... 30A max.(115 Vac Cold Start)

### GENERAL SPECIFICATIONS

Hold-up Time<sup>3</sup> ..... 16mS typ.  
Efficiency ..... 73%<sup>1</sup> min.  
..... 80%<sup>2</sup> typ.  
Leakage Current ..... 3 mA max.  
Short Circuit Protection ..... Current-foldback hiccup mode  
Overvoltage Protection ..... V1 Shutdown & Latch-up  
Overload Protection ..... 110% to 160%  
Total Output Power ..... 200 W max.

### LOGIC CONTROL

Power good/fail ... 3V3 logic signal goes high 100-300 msec after Vo on regulation, and goes low on Vo loss of regulation.

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range ..... 0°C to 70°C  
Derating 50°C to 70°C ..... 2.5%/°C  
Temperature Coefficient ..... ±0.04%/°C  
Storage Temperature Range ..... -40°C to +85°C  
Humidity, Non-Condensing ..... 0 to 95% RH  
EMI Filter(on Board):  
Conducted ..... Meets FCC/CISPR 22 Class B Specification

### NOTES:

1. Measured at Low Line, Full Load..
2. Measured at 90VAC, Full Load..
3. Measured at Vin =115 Vac, 80% Load, Vo>36V



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## OUTPUT SPECIFICATIONS

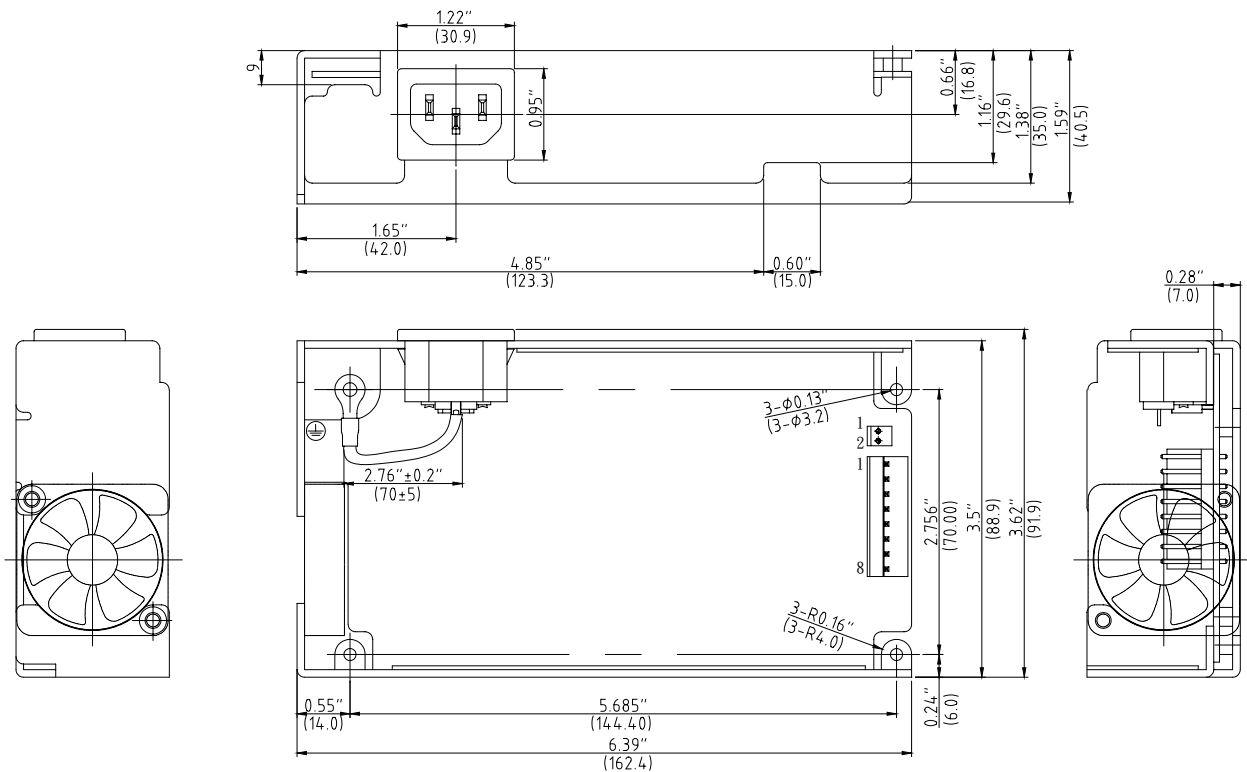
Model Number	Output Voltage		Output Current (Amps)		Ripple <sup>3</sup> P-P (mV)	Total Regulation <sup>4</sup>	Redundant	
	Nominal	Set Point <sup>1</sup>	Min.	Rated (With Fan) <sup>2</sup>				
UP2002R-( ) ( )	V1	-48V	-48V	0.15	4	480	±5%	Yes (Build-in OR-ing Diode)
	V2	12V	12.0V	0	1	120	±3%	

### NOTES:

1. The output voltage set point is ± 3%, with the outputs at 80% rated load.
2. The fan requires 6CFM air flow. Total output power must not exceed 200W.
3. Add a 1uF ceramic capacitor and a 10uF E.L. capacitor to the output cable. Peak to peak and RMS metering equipment shall have a 20 MHz response with probes and cables maintaining frequency response from 200 Hz to 100MHz bandwidth. Output ripple and spikes are measured directly at the output terminals of the power supply without the use of the probe ground clip.
4. Total regulation is defined as the static output regulations at 25°C, including initial tolerance, line voltage within stated limits, and load currents with stated limits.
5. Among V1, V2, FG can withstand 2250VDC Hi-Pot.

## PHYSICAL SPECIFICATIONS

### UP2002R-02

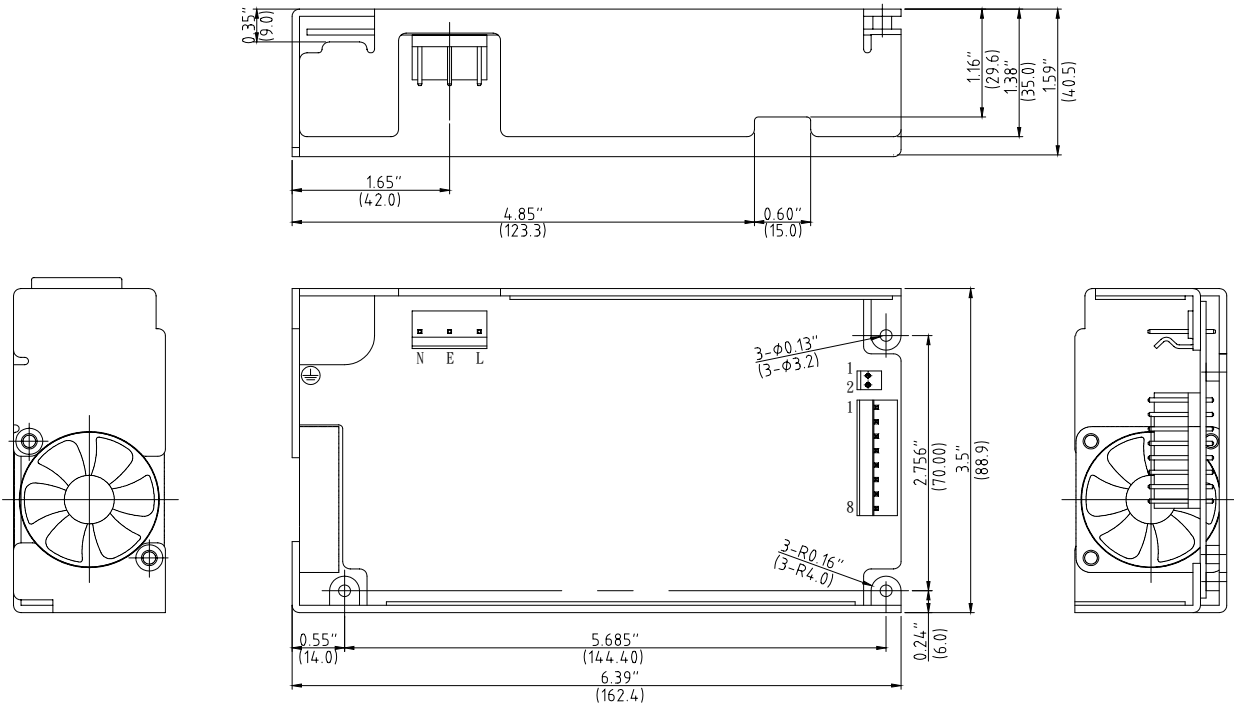


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UP2002R-04



**NOTES:**

1. Specifications subject to change without notice.
2. All dimensions are in inches (mm) tolerance is .xx =±0.04" .xxx =±0.010"

Input voltage	Pin	CN2 output connector: Molex 09-65-2088 3.96 mm pitch 8 pin		CN3 Fan output connector: LCU P2050-02 2.54 mm pitch 2 pin	
90-264 VAC	L&N	Pin 1	P.G/12V Return		
UP2002R-02	UP2002R-04	Pin 2	PG	Pin 1	12V
INALWAYS 0711-2 or EQUIVALENT	CN1 input connector Molex 09-65-2058 with second and fourth pin removed	Pin 3	12V		
		Pin 4	N.C		
	Molex mating connector Molex 5195 series housing with 5194 series crimp terminals	Pin 5,6	-48V	Pin 2	P.G/12V Return
		Pin 7,8	-48V Return		



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