

# UP0403A-( ) ( ) P SERIES

## 36 Watt AC/DC Adapter

- ◆ Universal Input 90 to 264 VAC
- ◆ Conductive EMI Meets FCC/VDE Class B
- ◆ MTBF 320 Khrs



### SPECIFICATIONS

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

### INPUT SPECIFICATIONS

Input Voltage Range ..... 90-264VAC  
Input Frequency ..... 47-63 Hz  
Inrush Current ..... 40A max.(Cold Start)  
Line Regulation<sup>1</sup> ..... ± 0.5%

### GENERAL SPECIFICATIONS

Hold-up Time ..... 16mS typ.  
Efficiency ..... 70% typ.  
Leakage Current ..... 0.5mA max.  
Short Circuit Protection ..... Continuous  
Overvoltage Protection ..... 5VDC output only  
Overload Protection ..... 120-200% of rated value  
Continuous Output Power ..... 36W max.

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range ..... 0°C to 50°C  
Derating 40°C to 50°C..... 2%/°C  
Temperature Coefficient ..... ± 0.02%/°C  
Storage Temperature Range ..... -40°C to +85°C  
Humidity, Non-Condensing ..... 0 to 95% RH  
Cooling ..... Free- Air Convection  
EMI Filter(on Board):  
Conducted ..... Meets FCC/VDE Class B Specification

### NOTE:

1. Measured from 90 to 264 VAC.

## OUTPUT SPECIFICATIONS

Model Number	Output <sup>1</sup> Voltage(Volts)	Output Current Limit(Amps)			Ripple <sup>2</sup> P-P (mV)	Load Regulation <sup>3</sup>		Cross <sup>4</sup> Regulation	O/P Power Max.
		Min.	Rated	Max.		Load Change			
						30-60%	60-100%		
UP0403A-01P	+5	0.0	4.0	4.0	5	± 4%	± 4%	--	36W
	+12	0.5	2.0	2.0	120	± 3%	± 3%	± 4.0%	
	-12	0.0	0.5	0.5	120	± 1%	± 1%	± 1.0%	
UP0403A-02P	+5	0.0	4.0	4.0	50	± 4%	± 4%	--	36W
	+12	0.5	2.0	2.0	120	± 3%	± 3%	± 4.0%	
	-5	0.0	0.5	0.5	50	± 1%	± 1%	± 1.0%	
UP0403A-03P	+5	0.0	4.0	4.0	50	± 4%	± 4%	--	36W
	+15	0.4	2.0	2.0	150	± 3%	± 3%	± 4.0%	
	-15	0.0	0.5	0.5	150	± 1%	± 1%	± 1.0%	
UP0403A-04P	+5	0.0	4.0	4.0	50	± 4%	± 4%	--	36W
	+24	0.25	1.0	1.0	240	± 3%	± 3%	± 4.0%	
	-12	0.0	0.5	0.5	120	± 1%	± 1%	± 1.0%	

### NOTES:

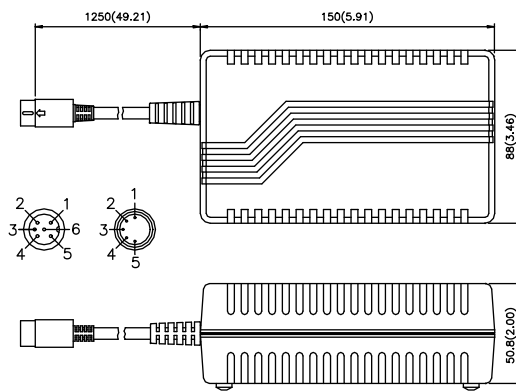
- The 5V output voltage is set to ± 1%, with all the outputs at rated load, any adjustment on the +5V will cause the auxiliary outputs to rise or fall proportionally.
- Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to the output cable. Peak to peak and RMS metering equipment shall have a 20 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.
- Load regulation is measured at 115VAC or 230VAC input voltage and UMEC standard output cable.
- Cross regulation is measured by loading the outputs as following: +5V at 3A, +12V at 1.5A or +24V at 1A, -12V at 0.2A or -5V at 0.5A. The varying the +5V output load current from 1.5A to 3A note the effects of load and cross regulation are not cumulative, and may actually act to cancel each other in an operating system environment
- Replace input line fuse with same type rating. Recommended 2A/250 VAC fast blow fuse.

## PHYSICAL SPECIFICATIONS

Weight : 550g

Case Material : ABS Plastic UL94V-0 Flammability Rated

### DC plug & pin assignment (CUSTOM DESIGN IS AVAILABLE)



**COLORS**  
IVORY WHITE OR BLACK

### NOTES:

- All dimensions in mm (inches)
- Tolerance: ± 1(.xx=± 0.04)

Output Pin No.	UP0403A-01P	UP0403A-02P	UP0403A-03P	UP0403A-04P	Connectors	
PIN1	GND	GND	GND	GND	DIN PLUG (5P 180°)	DIN PLUG (6P 240°)
PIN2	+5V	+5V	+5V	+5V		
PIN3	GND	GND	GND	GND		
PIN4	+12V	+12V	+15V	+24V		
PIN5	-12V	-5V	-15V	-12V		
PIN6	+5V	+5V	+5V	+5V		