



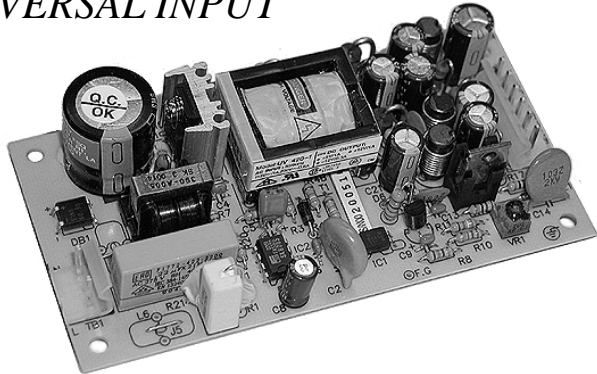
**TRI-MAG, Inc.**  
*your* POWER Specialists

1601 N. CLANCY CT. • VISALIA, CA 93291  
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<http://www.tri-mag.com>  
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# UV420 SERIES

## 20 Watt

### UNIVERSAL INPUT



### GENERAL SPECIFICATIONS

Input Voltage.....	85VAC to 270VAC or 120VDC to 350VDC
Input Current.....	1 A AT 115VAC 0.6 A AT 230VAC
Input Frequency.....	47Hz to 63Hz
Inrush Current (cold).....	15A @ 115VAC 30A @ 230VAC
Operating Temperature.....	0 to 50°C
Storage Temperature.....	-40°C to 85°C
Cooling.....	Free Air Convection
Efficiency.....	70% Typical
Holdup Time.....	16ms at 115VAC
Overvoltage Type.....	Crowbar Trip Point, 5.7V to 6.7V or Rated Output +2V
Overload Protection.....	Foldback at 150% load
Output # 1 Voltage Adjustable.....	±10%
Safety:	
Designed in full compliance with.....	UL 60950-1 CSA 22.2 No. 60950-1 EN60950

### DESCRIPTION

Tri-Mag, Inc. UV420 Series, these 20 watt switchers feature small size, low cost, high efficiency with universal input ranging from 85 VAC to 270 VAC without jumpers.

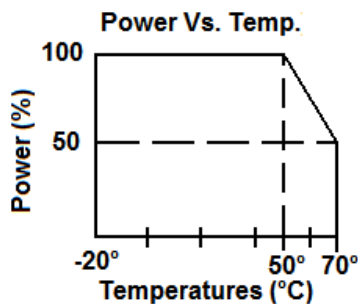
The series have over load hiccup mode protection on all single and multiple outputs. The UV420 Series is designed in full compliance to UL 60950-1, CSA22.2 #234, and VDE EN60950.

### FEATURES

- 80 TO 270VAC Universal Input
- Innovative Mosfet Design
- Low Cost
- High Efficiency
- 100% Hi-Pot Test
- 100% Cycling On-Off Burn-In Test
- Burn-in Line Filter to Meet FCC Class B

### APPLICATIONS

- Hard Disk Subsystems
- External Floppy Disk Systems
- External Tape Back-Up Systems
- Terminal Systems
- Modems
- Printers & Plotters



### MECHANICAL SPECIFICATIONS

7.0 MECHANICAL SPECIFICATION

MECHANICAL SPECIFICATIONS:  
 Dimension Shown in IN ( Tolerance Specified is ±0.015")

PC Board Size:  
 4.724" x 2.362" x .945" for -1, -3 model  
 (120mm x 60mm x 24mm)

4.331" x 2.362" x .945" for other model  
 (110mm x 60mm x 24mm)

MOUNTING HOLE:  
 4.331" x 1.969" (110mm x 50mm) for  
 -1, -3 model  
 3.937" x 1.969" (100mm x 50mm) for  
 other model

TB1:  
 AC Input, Using Molex 5277-2 or Equivalent

TB2:  
 DC Output, Using Molex 5273-4, -6 or Equivalent



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**UV420 SERIES 20 WATT— PIN ASSIGNMENT**

Pin Model	1	2	3	4	5	6
UV420-1	+5V	+5V	COM	COM	-12V	+12V
UV420-2	+5V	+5V	COM	COM	-5V	+12V
UV420-3	+5V	+5V	COM	COM	N/C	+12V
UV420-5	+5V	COM	COM	+24V	N/C	-
UV420-6	+5V	+5V	COM	COM	-	-
UV420-7	+12V	-12V	COM	COM	-	-
UV420-9	+24V	+24V	COM	COM	-	-

**UV420 SERIES 20 WATT— OUTPUT SPECIFICATIONS**

Model	Voltage (Vdc)	Load (A)			Tolerance ±	Ripple & Noise	Regulation	
		Min.	Rate	Peak			Line	Load
UV420-1	+5V	0	1	3	1%	50 mV	1%	1%
	+12V	0	1	1.5	5%	100 mV	1%	4%
	-12V	0	0.3	0.5	10%	100 mV	1%	4%
UV420-3	+5V	0	1	3	1%	50 mV	1%	1%
	+12V	0	1	1.5	5%	100 mV	1%	4%
UV420-5	+5V	0	2.5	3.0	1%	50 mV	1%	1%
	+24V	0	0.5	1.0	5%	100 mV	1%	5%
UV420-6	+5V	0	4	5	1%	50 mV	1%	1%
UV420-7	+12V	0	2	3	1%	100 mV	1%	1%
UV420-9	+24V	0	1	1.5	1%	150 mV	1%	1%
UV420-2	+5V	0	1	3	1%	50 mV	1%	1%
	+12V	0	1	1.5	5%	100 mV	1%	4%
	-5V	0	0.6	1.0	10%	100 mV	1%	4%
UV420-14	+48V	0	0.5	-	1%	400 mV	1%	1%

**Note: Contact factory for Safety Agency Approved status.**



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# EC & EU SERIES

## 20 Watt

### UNIVERSAL INPUT WITH CHASSIS



**EC**

**EU**

### DESCRIPTION

Our Standard power supplies, the UV420 Series, can be installed into a fully enclosed chassis or in a 'U' shape chassis as an option. These options offer two mounting planes to choose from. The fully enclosed option help to reduce radiated noise.

### Dimension Table:

Figure	Inches	(mm)
A	5.52	140.20
B	2.81	71.37
C	1.60	40.64
D	4.00	101.6
E	0.75	19.05
F	2.00	50.8
G	1.50	38.1
H	0.85	21.59
I	1.48	37.59
J	1.30	33.02

### FEATURES, APPLICATIONS, SPECIFICATIONS

All features, applications, and electrical specifications are the same as the standard UV420 Series.

Part Number System:

UV420-1 EC (Fully enclosed chassis)

UV420-1 EU ('U' shape chassis)

### MECHANICAL SPECIFICATIONS

All Dimensions in Inches (mm)

#### Case Size:

5.92" x 3.20" x 1.80"

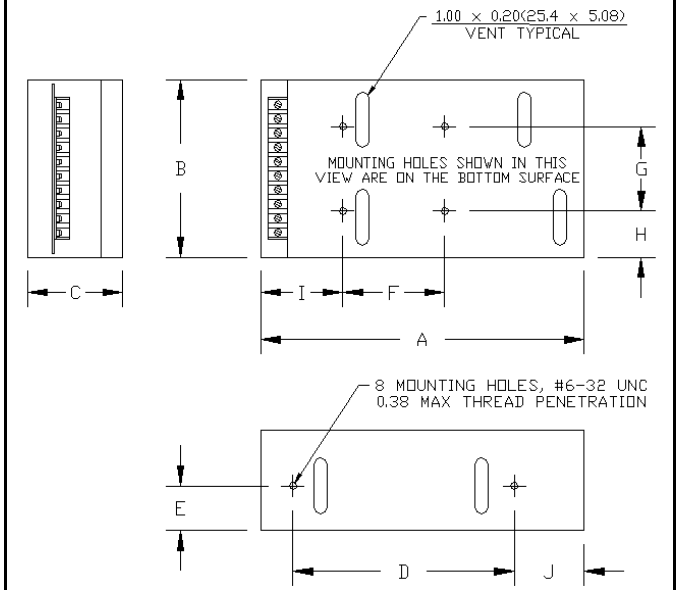
(150.3mm x 81.28mm x 45.72mm)

#### Mounting Holes:

2.00" x 1.50" or 4.00" 2 hole only

(50.8mm x 38.1mm) or (101.6mm 2 hole only)

Color: Black



### PIN ASSIGNMENT

Pin / Model	1	2	3	4	5	6	7	8	9	10
UV420-1 EC/EU	ACG	ACL	ACN		+5V	+5V	COM	COM	-12V	+12V
UV420-3 EC/EU	ACG	ACL	ACN		+5V	+5V	COM	COM	N/C	+12V
UV420-6 EC/EU	ACG	ACL	ACN		+5V	+5V	COM	COM		
UV420-7 EC/EU	ACG	ACL	ACN		+12V	+12V	COM	COM		
UV420-8 EC/EU	ACG	ACL	ACN		+15V	+15V	COM	COM		
UV420-9 EC/EU	ACG	ACL	ACN		+24V	+24V	COM	COM		