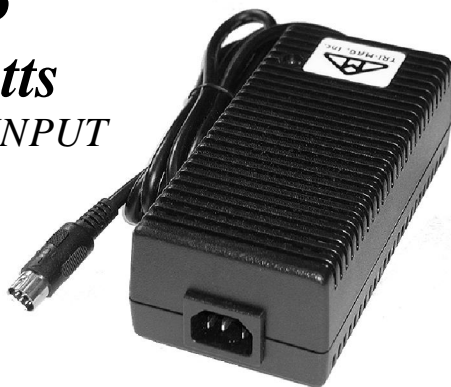


# DESK TOP SERIES

**10-70 Watts**  
UNIVERSAL INPUT



## GENERAL SPECIFICATIONS

Line Voltage..... 90VAC to 260VAC  
Input Frequency..... 47Hz to 63Hz  
Inrush Current (cold)..... Depend on model;  
115VAC, 230VAC  
Operating Temperature..... 0 to 50°C  
Storage Temperature..... -20°C to 85°C  
Cooling..... Free Air Convection  
Efficiency..... 70% Typical  
Holdup Time..... 20ms at 115VAC  
Overvoltage Type..... Crowbar  
Overload Protection..... Foldback  
Within 150% rated load

### Safety:

Designed in full compliance with..... UL 1950  
CSA 22.2 #234  
VDE EN60950

EMI..... Meet FCC class B  
VDE class B

## MECHANICAL SPECIFICATIONS

### All Dimension In Inches (mm)

### Tolerance:

±.039" (1mm) except length of cable

### Case Size:

DT 410 4.00" x 2.00" x 1.25" (101.6 x 50.8 x 31.8)

DT 420 5.90" x 2.95" x 1.69" (150 x 75 x 43)

DT 430 6.50" x 3.15" x 2.25" (165 x 80 x 57)

DT 450 6.50" x 3.15" x 2.25" (165 x 80 x 57)

DT 470 7.09" x 3.74" x 2.48" (180 x 95 x 63)

### Connectors:

See Drawing

### Length of cable:

5 ft.

## DESCRIPTION

DT Series is a 10, 20, 30, 50, 70 watt Desk-Top switching power supply. It comes with an IEC AC inlet to accommodate worldwide applications, These power supplies are perfect for low to medium power applications, such as Hard Disk Drives, Modems, Computers and other products that require an external power source.

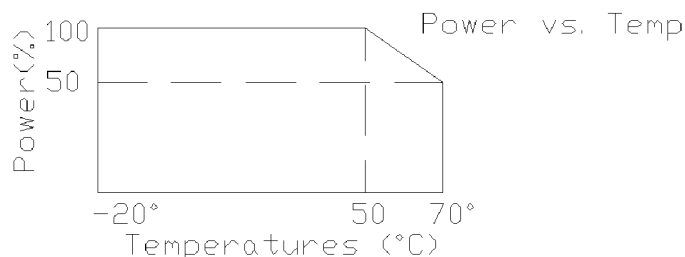
With TRI-MAG leadership in universal power supply technology, we have been able to incorporate our proven design into this space saving desk-top unit.

## FEATURES

- EMI FCC Class B
- No Minimum Load Required
- Single and Multiple Output
- Universal input 90VAC to 260VAC

## APPLICATIONS

- Computer Peripherals
- Modems
- Hard Disk Drives
- Tape Drives
- Test Instrumentation Product
- Data Acquisition



## OUTPUT SPECIFICATIONS

Model	Watts	Voltage (Vdc)	Load (A)			Tolerance ±	Ripple & Noise	Regulation	
			Min.	Rate	Peak			Line	Load
DT410-4	10	+5V	0	2.0	4.0	1%	50 mV	1%	3%
DT410-5	10	+12V	0	1.0	1.8	1%	50 mV	1%	3%
DT410-6	10	+24V	0	0.5	0.9	1%	100 mV	1%	3%
DT410-17	10	+9V	0	1.5	1.8	1%	100 mV	1%	3%
DT410-14	10	+48V	0	0.25	0.25	1%	200 mV	1%	3%
DT420-1	20	+5V	0	1.0	2.0	1%	50 mV	1%	3%
		+12V	0	1.0	2.0	5%	100 mV	1%	5%
		-12V	0	0.3	0.5	8%	100 mV	1%	5%
DT420-2	20	+5V	0	1.0	2.0	1%	50 mV	1%	5%
		+12V	0	1.0	2.0	5%	100 mV	1%	5%
DT420-4	20	+5V	0	4.0	-	1%	50 mV	1%	5%
DT430-1	30	+5V	0	2.0	3.0	1%	50 mV	1%	3%
		+12V	0	1.5	2.4	5%	120 mV	1%	5%
		-12V	0	0.3	0.5	8%	120 mV	1%	5%
DT430-3	30	+18V	0	2.0	-	1%	100 mV	1%	3%
DT430-5	30	+12V	0	2.5	-	1%	100 mV	1%	3%
DT430-8	30	+15V	0	2.0	-	1%	100 mV	1%	3%
DT430-6	30	+24V	0	1.5	-	1%	100 mV	1%	3%
DT430-4	30	+5V	0	5.0	-	1%	50 mV	1%	3%
DT450-1	50	+5V	0	3.0	4.0	1%	50 mV	1%	5%
		+12V	0	2.5	3.0	5%	120 mV	5%	6%
		-12V	0	0.3	0.5	8%	120 mV	8%	5%
DT450-2	50	+5V	0	3.5	4.0	1%	50 mV	1%	5%
		+12V	0	2.5	3.0	5%	120 mV	5%	6%
DT450-3	50	+18V	0	3.0	3.0	1%	100 mV	1%	5%
DT450-4RS	50	+5V	0	8.0	8.0	1%	50 mV	1%	5%
DT450-5	50	+12V	0	4.2	4.2	1%	100 mV	1%	5%
DT450-6	50	+24V	0	2.3	2.3	1%	100 mV	1%	5%
DT450M-6	50	+24V	0	2.3	2.3	1%	100 mV	1%	5%
DT450-14	50	+48V	0	1.1	-	1%	250 mV	1%	5%
DT470-5	70	+12V	0	6.0	-	1%	100 mV	1%	5%
DT470-8	70	+15V	0	5.0	-	1%	100 mV	1%	5%
DT470-3	70	+18V	0	4.0	-	1%	100 mV	1%	5%
DT470-6	70	+24V	0	3.2	-	1%	150 mV	1%	5%
DT470-14	70	+48V	0	1.5	-	1%	200 mV	1%	5%

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

- Each output can provide up to peak load temporarily. Continuous staying in more than rated load is not allowed.
- At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- Line regulation is defined by changing  $\pm 10\%$  of input voltage from nominal line at rated load.
- Load regulation is defined by changing  $\pm 40\%$  of measured output load from 60% rated load.
- The ripple and noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47  $\mu$ F capacitor at rated load and nominal line.
- Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to 95% output voltage at rated load and nominal line.
- Efficiency is measured at rated load.

\*RS—Remote Sense

\*M—Medical Application



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

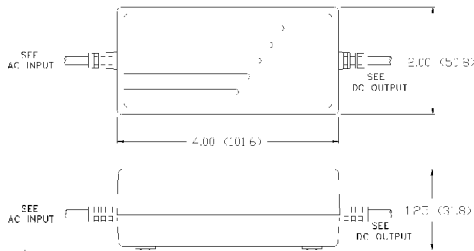
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# DESK TOP SERIES

## CONTINUED

### MECHANICAL SPECIFICATIONS

All specifications subject to change without notice.



#### Connectors:

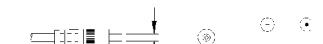
##### a) AC input

North America, Nema 5-15P style 3 wires plug



##### b) DC output

DC power jack, #2.1mm socket type, 5 Ft. cable



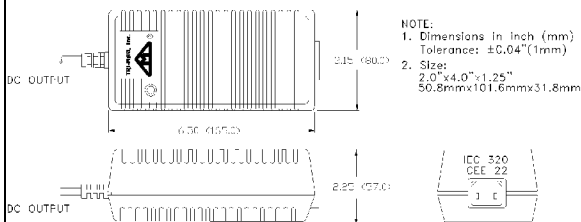
- NOTE:  
1. Dimensions in inch (mm)  
Tolerance:  $\pm 0.04$ " (1mm)  
2. Size: 2.0"x4.0"x1.25"  
50.8mmx101.6mmx31.8mm

Output Polarity

**DT 410**

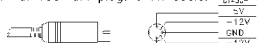
### MECHANICAL SPECIFICATIONS

All specifications subject to change without notice.



#### DC Output Connectors:

(A) 5 pin at 180° din plug, 5 Ft. cable.



(B) DC power jack, #2.1mm socket type, 5 Ft. cable. For single Output.



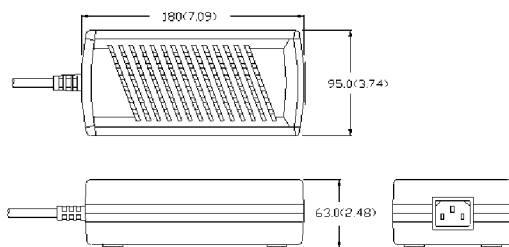
#### PIN ASSIGNMENT:

PIN	WIRE	OUTPUT
3	RED	+5V
5	YELLOW	+12V
2	WHITE	+12V
4	BROWN	RETURN
1	BLACK	RETURN
SHEATH	STRIPS	GROUND

Output Polarity

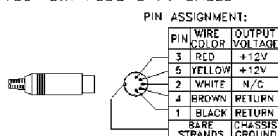
**DT 430**

### MECHANICAL SPECIFICATIONS

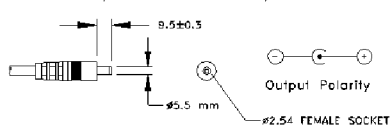


#### DC OUTPUT CONNECTOR

A) 5 PIN AT 180° DIN PLUG 5 FT CABLE



B) DC POWER JACK, #2.54mm FEMALE, SOCKET 5 FT CABLE



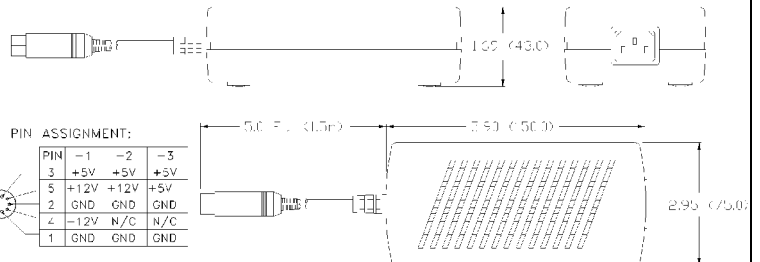
#### PIN ASSIGNMENT:

PIN	WIRE	OUTPUT
3	RED	+12V
5	YELLOW	+12V
2	WHITE	N/C
4	BROWN	RETURN
1	BLACK	RETURN
SHEATH	STRIPS	GROUND

Output Polarity

**DT 470**

### MECHANICAL SPECIFICATIONS



#### PIN ASSIGNMENT:

PIN	-1	-2	-3
3	+5V	+5V	+5V
5	+12V	+12V	+5V
2	GND	GND	GND
4	-12V	N/C	N/C
1	GND	GND	GND

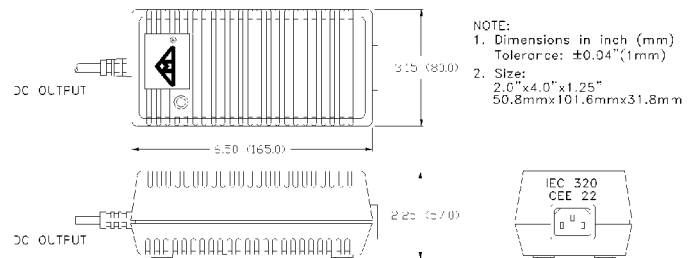
#### NOTE:

- Dimensions shown in INCH (mm) as above.  
Tolerance:  $\pm 0.04$ " (1mm)
- Size: 2.95" x 5.90" x 1.69", 75mm x 150mm x 43mm

**DT 420**

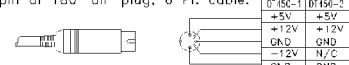
### MECHANICAL SPECIFICATIONS

All specifications subject to change without notice.

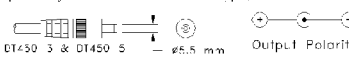


#### DC Output Connectors:

(A) 5 pin at 180° din plug, 6 Ft. cable.



(B) DC power jack, #2.1mm socket type, 6 Ft. cable. For Single Output.



#### PIN ASSIGNMENT:

PIN	WIRE	OUTPUT
3	RED	+5V
5	YELLOW	+12V
2	WHITE	+12V
4	BROWN	RETURN
1	BLACK	RETURN
SHEATH	STRIPS	GROUND

Output Polarity

**DT 450**