



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

1601 N. CLANCY CT. • VISALIA, CA 93291  
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# DESK TOP DT-Z SERIES

## 20-100 Watts

UNIVERSAL  
 INPUT

*Green Power*

*California Efficiency*



### GENERAL SPECIFICATIONS

Line Voltage.....	90VAC to 264VAC
Input Frequency.....	47Hz to 63Hz
Inrush Current (cold).....	Depend on model; 115VAC, 230VAC
Operating Temperature.....	-20°C to 60°C
Storage Temperature.....	-20°C to 85°C
Cooling.....	Free Air Convection
Efficiency.....	70% - 85%
Holdup Time.....	20ms at 115VAC
Overvoltage Type.....	latch off
Overload Protection.....	Auto recovery Within 150% rated load
Short Circuit Protection.....	Auto Recovery
Safety:	
Designed in full compliance with.....	UL 60950-1 LPS CSA 22.2 #60950-1 EN60950-1
EMI.....	FCC class B CISPR 22 level B
EMS.....	EN61000-4-2,-3,-4,-5,-6,-11

### DESCRIPTION

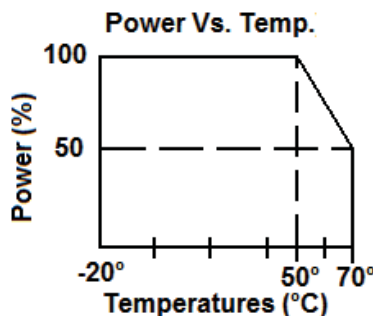
DT-Z Series is a 20, 30, 40, 60, 80 and 100 watt desk series, Desk-Top switching power supply. It comes with an IEC 320 C8, C6, or C14 inlet to accommodate worldwide applications, These power supplies are perfect for low to medium power applications. It is design with a quasi-resonant topology to increase the efficiency up to 85%. Low input power at no load condition meets green power requirements. 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 Output
- Universal input 90VAC to 264VAC

### APPLICATIONS

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



### MECHANICAL SPECIFICATIONS

#### Case Size:

DT020Z	3.78" x 2.05" x 1.25" (96 x 52 x 32.5)mm
DT030Z	4.33" x 2.13" x 1.32" (110 x 54 x 33.5)mm
DT040Z	4.73" x 2.29" x 1.46" (120 x 58 x 37.0)mm
DT060Z	5.31" x 2.57" x 1.57" (135 x 65 x 40.0)mm
DT080Z	5.7" x 2.83" x 1.65" (145 x 72 x 42.0)mm
DT099Z	6.57" x 3.03" x 1.85" (167 x 77 x 47.0)mm

#### Connectors: AC Input IEC320

C8: DT020Z-XX, DT030Z-XX, DT040Z-XX,  
DT060Z-XX

C6: DT020Z-XX-3, DT030Z-XX-3, DT040Z-XX-3

C14:DT080Z, DT099Z (Only)

#### Connectors: DC Output

DC Power Plug

DT020Z, DT030Z, DT040Z

2.1mm I.D. x 2.5mm O.D.

4 Pin Hosiden

DT080Z, DT099Z

#### Length of cable:

6 ft.

#### DC Output:

Box Color: Black



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### OUTPUT SPECIFICATIONS

Model	Watts	Voltage (Vdc)	Load (A)			Tolerance ±	Ripple & Noise	Regulation	
			Min.	Rate	Peak			Line	Load
DT020Z-4	20	+5V	0	2.0	3.0	1%	50 mV	1%	4%
DT020Z-17	20	+9V	0	1.8	2.5	1%	80 mV	1%	3%
DT020Z-5	20	+12V	0	1.3	2.0	1%	80 mV	1%	2%
DT020Z-8	20	+15V	0	1.0	1.6	1%	80 mV	1%	1%
DT020Z-6	20	+24V	0	0.7	1.0	1%	80 mV	1%	1%
DT020Z-14	20	+48V	0	0.35	0.5	1%	400 mV	1%	1%
DT030Z-17	30	+9V	0	3.3	4.6	1%	150 mV	1%	5%
DT030Z-5	30	+12V	0	2.5	4.0	1%	100 mV	1%	3%
DT030Z-8	30	+15V	0	2.0	3.0	1%	100 mV	1%	2%
DT030Z-6	30	+24V	0	1.3	1.8	1%	200 mV	1%	1%
DT030Z-14	30	+48V	0	0.75	1.0	1%	400 mV	1%	1%
DT040Z-4	40	+5V	0	6.0	9.0	1%	50 mV	1%	5%
DT040Z-17	40	+9V	0	4.5	6.7	1%	150 mV	1%	5%
DT040Z-5	40	+12V	0	3.7	5.6	1%	100 mV	1%	3%
DT040Z-8	40	+15V	0	3.0	4.5	1%	100 mV	1%	2%
DT040Z-6	40	+24V	0	1.9	2.9	1%	200 mV	1%	1%
DT040Z-14	40	+48V	0	1.0	1.5	1%	400 mV	1%	1%
DT060Z-5	60	+12V	0	4.2	5.0	1%	80 mV	1%	3%
DT060Z-8	60	+15V	0	3.6	4.6	1%	80 mV	1%	3%
DT060Z-6	60	+24V	0	2.5	3.0	1%	120 mV	1%	3%
DT060Z-14	60	+48V	0	1.25	1.5	1%	240 mV	1%	3%
DT080Z-5	80	+12V	0	6.0	9.0	1%	100 mV	1%	3%
DT080Z-8	80	+15V	0	5.0	7.5	1%	100 mV	1%	3%
DT080Z-3	80	+18V	0	4.5	6.7	1%	100 mV	1%	3%
DT080Z-6	80	+24V	0	3.3	5.0	1%	100 mV	1%	3%
DT080Z-14	80	+48V	0	1.75	2.5	1%	200 mV	0.5%	3%
DT099Z-5	100	+12V	0	7.5	11	1%	100 mV	0.5%	3%
DT099Z-8	100	+15V	0	6.0	8.6	1%	100 mV	0.5%	3%
DT099Z-6	100	+24V	0	4.2	5.8	1%	100 mV	0.5%	3%
DT099Z-14	100	+48V	0	2.1	2.9	1%	200 mV	0.5%	3%

**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 ±10% of input voltage from nominal line at rated load.
- Load regulation is defined by changing ±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 µF 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.

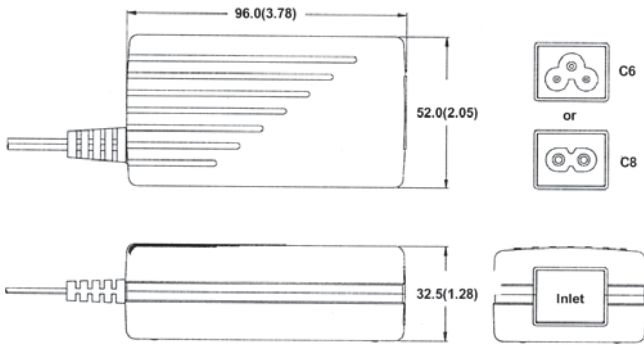


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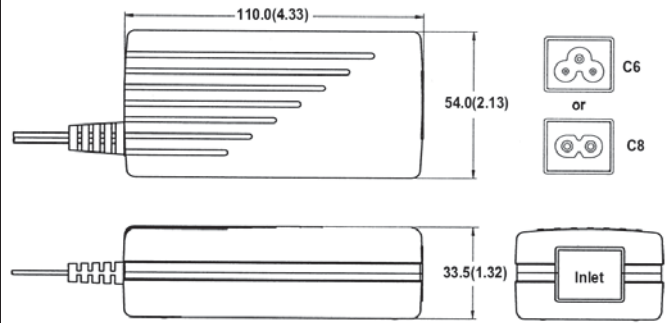
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**MECHANICAL SPECIFICATIONS**

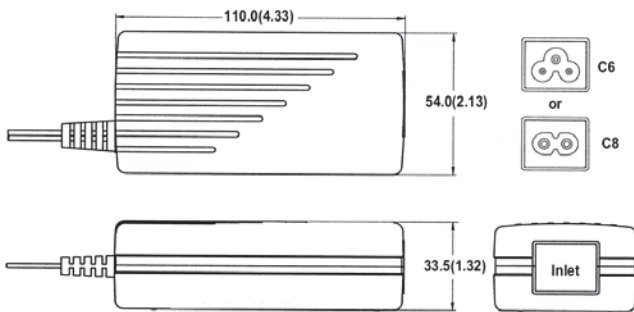
**DT020Z SERIES** C6: DT020Z-XX-3  
 3.78" x 2.05" x 1.25" (96 x 52 x 32.5) C8: DT020Z-XX



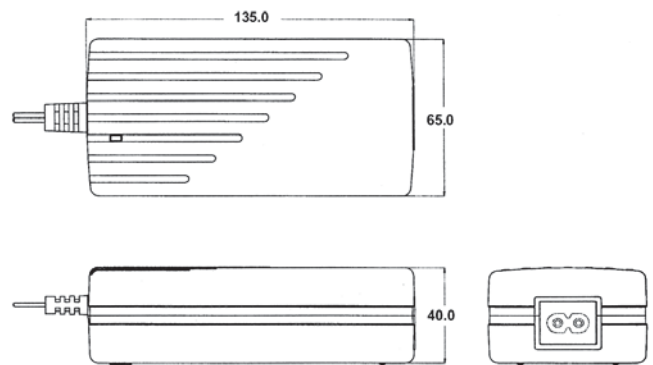
**DT030Z SERIES** C6: DT030Z-XX-3  
 4.33" x 2.13" x 1.32" (110 x 54 x 33.5) C8: DT030Z-XX



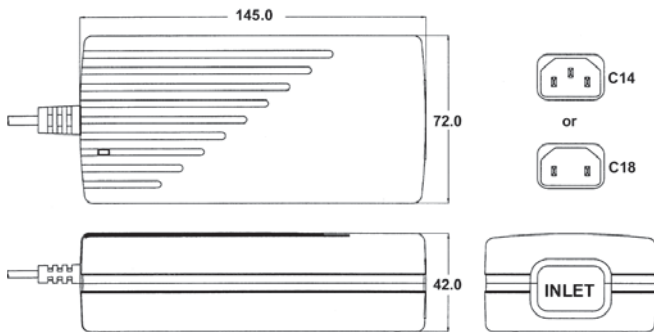
**DT040Z SERIES** C6: DT040Z-XX-3  
 4.73" x 2.29" x 1.46" (120 x 58 x 37.0) C8: DT040Z-XX



**DT060Z SERIES**  
 5.31" x 2.57" x 1.57" (135 x 65 x 40.0)



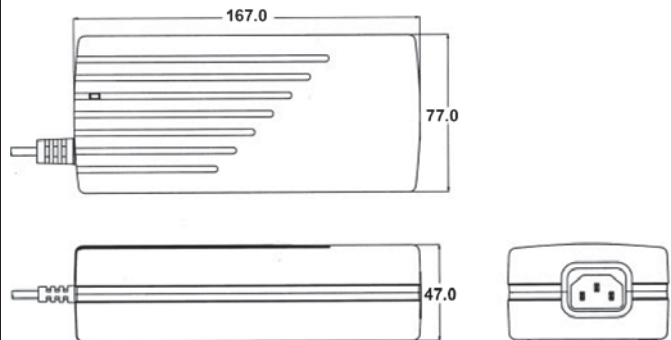
**DT080Z SERIES** C14: DT080Z-XX-3  
 5.7" x 2.83" x 1.65" (145 x 72 x 42.0) C18: DT080Z-XX



DT080Z-XX-3

PIN	VOLTAGE	PIN	WIRE COLOR
1	GND	1	GND
3	GND	3	GND
4	+V	4	+V
2	+V	2	+V
EARTH		DT080Z-XX (Only)	

**DT099Z SERIES**  
 6.57" x 3.03" x 1.85" (167 x 77x 47.0)



PIN	WIRE COLOR
1	+V
3	GND
4	GND
2	+V

All Dimension In Inches (mm) Tolerance: ±.039" (1mm)

All specifications and prices subject to change without notice