

DESCRIPTION

The TMP55 series consists of 15 standard desktop AC/DC switching power adapters with 40 to 55 watts of continuous output power. The units are enclosed in a 94V-1 rated plastic case with an IEC 320 inlet to mate with interchangeable cord for world-wide use. An on/off switch can be added at customer's request. All models meet CISPR 11 and FCC class B emission limits, and are designed for medical applications.

FEATURES

- 15 standard desktop models
- Single, dual or triple outputs
- Optional output connectors
- Optional on/off switch
- 100% burn-in
- Wide input range 85 to 264VAC
- Input surge current protection
- Overvoltage protection
- Overcurrent protection

INPUT SPECIFICATIONS

Input voltage : 85 to 264 VAC
Input frequency : 47 to 63 Hz
Input current : 1.50A (rms) for 115 VAC
0.90A (rms) for 230VAC
Leakage current : 90 μ A max. @ 115VAC, 60Hz
150 μ A max. @ 230VAC, 50Hz

OUTPUT SPECIFICATIONS

Output voltage/current : See rating chart
Total output power : 55 watts maximum
Ripple and noise : 1% peak to peak maximum
Overvoltage protection : Provided on output #1 only; set at 112-132% of its nominal output voltage
Overcurrent protection : All outputs protected to short circuit conditions
Temperature coefficient : All outputs $\pm 0.04\%/^{\circ}\text{C}$ maximum
Transient response : Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 μ s after a 25% step load change

ENVIRONMENTAL SPECIFICATIONS

Operating temperature : 0 $^{\circ}\text{C}$ to +70 $^{\circ}\text{C}$
Storage temperature : -40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$
Relative humidity : 5% to 95% non-condensing
Derating : Derate from 100% at +50 $^{\circ}\text{C}$ linearly to 50% at +70 $^{\circ}\text{C}$

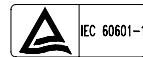
TMP55 SERIES



Safety Standard Approvals :



UL 2601-1
CSA C22.2 No. 601.1



TÜV EN60601-1

GENERAL SPECIFICATIONS

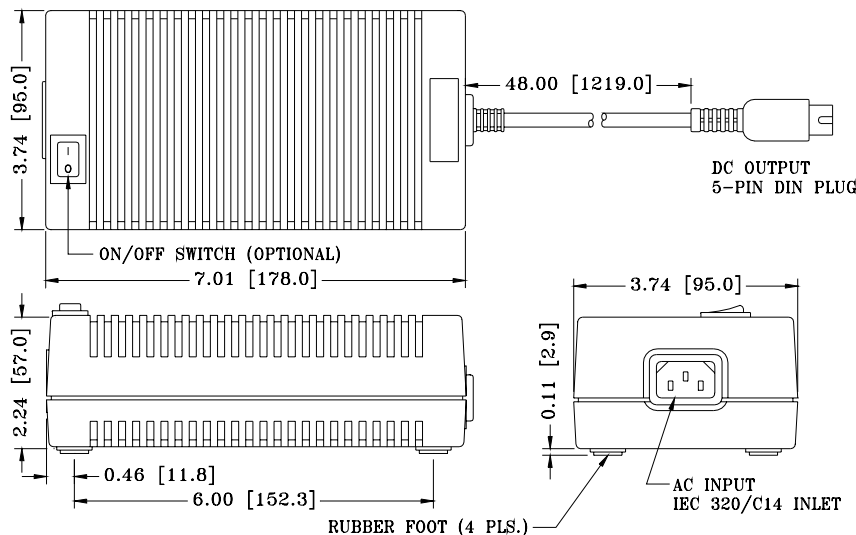
Switching frequency : 40KHz ± 5 KHz
Efficiency : 70% minimum on single output models with $V_o \geq 10\text{V}$, 65% minimum on the others
Hold-up time : 10 msec minimum at 110VAC
Line regulation : $\pm 0.5\%$ maximum at full load
Inrush current : 15 amps @ 115VAC, or 30 amps @ 230VAC, at 25 $^{\circ}\text{C}$ cold start
Withstand voltage : 4000VAC from input to output
1500VAC from input to ground
500VAC from output to ground
MTBF : 450,000 hours minimum at full load at 25 $^{\circ}\text{C}$ ambient, calculated per MIL-HDBK-217F
EMC performance (EN60601-1-2: 2001)
EN55011 : Class B conducted, Class B radiated
FCC : Class B conducted, Class B radiated
VCCI : Class B conducted, Class B radiated
EN61000-3-2 : Harmonic distortion, Class A
EN61000-3-3 : Line flicker
EN61000-4-2 : ESD, $\pm 8\text{KV}$ air and $\pm 6\text{KV}$ contact
EN61000-4-3 : Radiated immunity, 3V/m for 80-2500MHz
EN61000-4-4 : Fast transient/burst, $\pm 2\text{KV}$
EN61000-4-5 : Surge, $\pm 1\text{KV}$ diff, $\pm 2\text{KV}$ com.
EN61000-4-6 : Conducted immunity, 3Vrms
EN61000-4-8 : Magnetic field immunity, 3A/m
EN61000-4-11 : Voltage dips, 30% reduction for 500ms, 60% reduction for 100ms and >95% reduction for 10ms

OUTPUT VOLTAGE/CURRENT RATING CHART

Product No.	Output #1				Output #2				Output #3				Maximum Output Power
	Vnom.	Imin.	Imax.	Tol.	Vnom.	Imin.	Imax.	Tol.	Vnom.	Imin.	Imax.	Tol.	
TMP55-S05	5-6V	0A	8.0A	5%			(N/A)				(N/A)		40W
TMP55-S06	6-8V	0A	7.5A	5%			(N/A)				(N/A)		45W
TMP55-S09	9-11V	0A	5.0A	5%			(N/A)				(N/A)		50W
TMP55-S12	11-13V	0A	4.6A	5%			(N/A)				(N/A)		55W
TMP55-S15	13-17V	0A	3.7A	3%			(N/A)				(N/A)		55W
TMP55-S19	17-21V	0A	3.1A	3%			(N/A)				(N/A)		55W
TMP55-S24	21-27V	0A	2.3A	3%			(N/A)				(N/A)		55W
TMP55-S30	27-33V	0A	1.9A	3%			(N/A)				(N/A)		55W
TMP55-S36	33-39V	0A	1.6A	3%			(N/A)				(N/A)		55W
TMP55-S48	48V	0A	1.2A	3%			(N/A)				(N/A)		55W
TMP55-D23	+5V	1A	5.0A	5%	+12V	0.5A	3.0A	5%			(N/A)		45W
TMP55-D24	+5V	1A	5.0A	5%	+15V	0.4A	2.5A	5%			(N/A)		45W
TMP55-D25	+5V	1A	5.0A	5%	+24V	0.3A	2.0A	5%			(N/A)		45W
TMP55-T31	+5V	1A	5.0A	5%	+12V	0.5A	3.0A	5%	-12V	0.1A	0.5A	10%	45W
TMP55-T32	+5V	1A	5.0A	5%	+15V	0.4A	2.5A	5%	-15V	0.1A	0.5A	10%	45W

- Notes:
- (1) The output voltage of a single output model, except TMP55-S48, can be adjusted by user in the stated range, or set by factory to a wanted value in the range at the request of a user when ordering.
 - (2) The output voltages of a multiple output model may go outside of the stated tolerance when an output load current is out of stated limits. All models may be operated at no-load without damage.

MECHANICAL SPECIFICATIONS



NOTES:

1. Dimensions show in inch [mm]
2. Tolerance 0.02 [0.5] maximum
3. Weight: 700 grams approx.
4. Standard output connector is a 5-pin at 180° male DIN plug. For other output connector options, please consult TRUMPower.
5. To order a model with on/off switch, add suffix "S", e.g. TMP55-S12-S

PIN CHART

Product No.	PIN	1	2	3	4	5
TMP55-S05 TMP55-S12 TMP55-S24 TMP55-S48	TMP55-S06 TMP55-S15 TMP55-S30 TMP55-S36	DC RETURN	DC RETURN	DC OUTPUT	DC RETURN	DC OUTPUT
TMP55-D23	TMP55-D24 TMP55-D25	COMMOM RETURN	COMMOM RETURN	OUTPUT #1	COMMOM RETURN	OUTPUT #2
TMP55-T31	TMP55-T32	COMMOM RETURN	COMMOM RETURN	OUTPUT #1	OUTPUT #3	OUTPUT #2