TRUMPower

TSA131 Series

130W ITE Grade Power Adapters

FEATURES

- IEC 320/C14 AC Inlet
- 12V to 55V Output Voltages Available
- Active Power Factor Correction
- 87% Minimum Efficiency
- LED Power Indicator
- Optional ON/OFF Switch
- CEC & Energy Star Level V Compliance



INPUT SPECIFICATIONS

Input Voltage Range	90~260 VAC
Input Frequency	47~63Hz
Input Current	1.58A rms @ 100 VAC, 0.64A rms @ 240 VAC
Inrush Current	30A @ 115 VAC or 50A @ 230 VAC, at 25°C cold start
Earth Leakage Current	0.75mA max. @ 240 VAC, 60Hz

OUTPUT SPECIFICATIONS

Output Power Ratings	See models list
No Load Power Cons.	0.5W, max.
Line Regulation	±1% max.
Ripple and Noise*	1% peak to peak max. at full load
Overvoltage Protection	Set at 112-132% of its nominal output voltage; crowbar design
Overcurrent Protection	Set at 110-150% of its nominal output voltage
Temperature Coefficient	±0.04%/°C max.
Transient Response	4 ms @ 110 VAC, full load

* Measured with 20MHz bandwidth at rated line voltage and output load ranges, with a 10μF tantalum capacitor in parallel with a 0.1μF ceramic capacitor in parallel across the output.

GENERAL SPECIFICATIONS

Power Factor	0.95 min.
Efficiency	87% min @ full load
Switching Frequency	65KHz
Start-Up Time	2s @ 110 VAC
Hold-Up Time	16ms @ 110 VAC
Operating Temperature	0°C to +70°C
Derating	Derate from 100% at +40°C linearly to 50% at +70°C
Storage Temperature	-40°C to +85°C
Relative Humidity	0°C to +95°C non-condensing
Withstand Voltage	4,242 VDC from input to output 3,232 VDC from input to ground
MTBF	112K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F

STANDARDS & COMPLIANCES

EN 55011, EN 55022	Class B, conducted & radiated
FCC, VCCI	Class B, conducted & radiated
EN 61000-3-2	Harmonic distortion, Class A & D
EN 61000-3-3	Line flicker
EN 61000-4-2	ESD, ±8 KV air and ±6 KV contact
EN 61000-4-3	Radiated immunity, 3V/m
EN 61000-4-4	Fast transient/burst, ±2 KV
EN 61000-4-5	Surge, ±1 KV diff., ±2 KV com.
EN 61000-4-6	Conducted immunity, 3 Vrms
EN 61000-4-8	Magnetic field immunity, 3A/m
EN 61000-4-11	Voltage dip immunity, 30% reduction for 500ms, 60% reduction for 100ms, >95% reduction for 10ms
Safety Standards	UL/IEC/EN 60950-1 (2nd Edition)
Agency Approvals	UL, cUL, TUV, PSE, CCC, CE, CB
Other Compliances	RoHS, Energy Star 2.0, CEC Level V

MODELS LIST

Product No. (1)	Output Voltage	Output Current	Total Regulation	Maximum Power
TSA131-XX	12~13V	10.84~10A	5%	130W
TSA131-XX	13~16V	10~8.12A	5%	130W
TSA131-XX	16~21V	8.12~6.19A	5%	130W
TSA131-XX	21~27V	6.19~4.81A	3%	130W
TSA131-XX	27~33V	4.81~3.93A	3%	130W
TSA131-XX	33~40V	3.93~3.25A	3%	130W
TSA131-XX	40~50V	3.25~2.6A	3%	130W
TSA131-XX	50~55V	2.6~2.36A	3%	130W

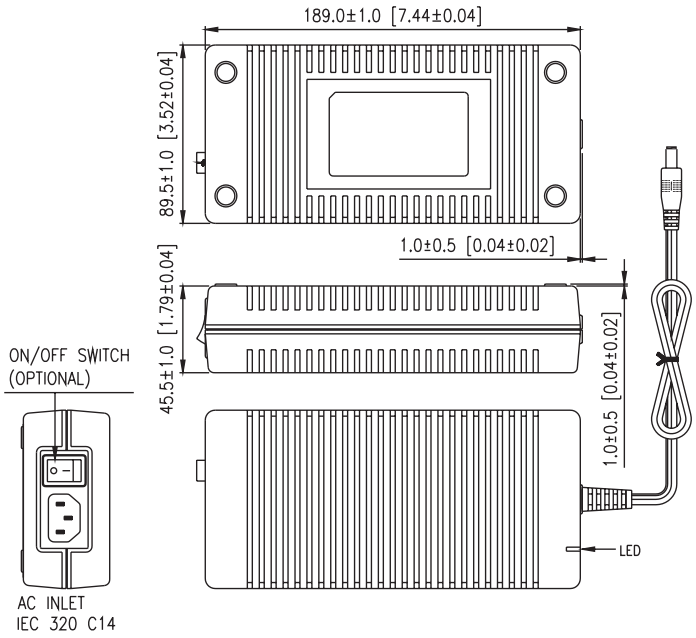
Notes:

1) When ordering, specify the requested voltage, e.g. TSA131-15 for 15V.
2) To order a model with an on/off switch, add suffix "-S" to the model number, e.g. TSA131-15-S.

Tumbler Technologies + TRUMPower

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MECHANICAL SPECIFICATIONS



Unit: inch [mm]
Tolerance: 0.02 [0.5] maximum
Weight: 800g (1.77 lbs) approx.

Notes:
1. Standard output connector is a male 5-pin DIN plug.
2. Contact TRUMPower for output connector options.

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