



**FEATURES**

- High Power Density Design with GaN FETs
- 100 x 200 x 27 mm Slim & Compact Enclosure
- 92% Efficiency
- 0.98 Active Power Factor
- 0°C to +70°C Operating Temperature
- Approved to EN 62368-1 & UL 62368-1 Safety Standards



**MODELS LIST**

Product No.	Output Voltage	Output Current	Maximum Power
TGA330-19.5	19.5V	0A-16.9A	330W
TGA330-24	24V	0A-13.75A	330W

**INPUT SPECIFICATIONS**

Input Voltage Range ..... 90-264 VAC  
 Input Frequency ..... 47-63Hz  
 Input Current ..... 3.4A (rms) @ 100 VAC  
   1.7A (rms) @ 240 VAC  
 Inrush Current ..... 100A @ 100V or 200A @ 240V  
   AC input at 25°C cold start  
 Earth Leakage Current ..... 250  $\mu$ A max. @ 264 VAC, 50 Hz  
 No Load Power ..... <0.5W

**OUTPUT SPECIFICATIONS**

Output Power Ratings ..... See table  
 Load Regulation .....  $\pm$ 5% max.  
 Ripple and Noise\* ..... <150 mVp-p typical  
 Overvoltage Protection ..... Set at 115-140% of its nominal  
   output voltage  
 Overcurrent Protection ..... Protected to short-circuit  
   conditions  
 Over Temperature Protection ... Protected to over temperature  
   conditions  
 Temperature Coefficient .....  $\pm$ 0.04%/°C max.  
 Transient Response ..... Max. excursion of 4% or better  
   on all models, recovering to 1%  
   of final value within 500 us after  
   a 25% step load change

\* Measured with 20MHz bandwidth at rated line voltage and output load ranges, with a 47 $\mu$ F aluminum capacitor in parallel with a 0.1 $\mu$ F ceramic capacitor in parallel across the output.

**GENERAL SPECIFICATIONS**

Power Factor ..... >0.97 @ full load, 100/240 VAC  
 Efficiency ..... >91% @ full load, 100/240 VAC  
 Turn-on Delay Time ..... <3 sec. @ full load, 100/240 VAC  
 Hold-up Time ..... >18 ms @ full load, 100/240 VAC  
 Line Regulation .....  $\pm$ 0.5% max. at full load  
 Operating Temperature ..... 0°C to +70°C  
 Derating ..... Derate from 100% at +40°C linearly  
   to 60% at +70°C  
 Storage Temperature ..... -20°C to +80°C  
 Relative Humidity ..... 10% to 90% non-condensing  
 Withstand Voltage ..... 4,242 VDC, Input to output  
   2,545 VDC, Input to ground  
 Operating Altitude ..... 5,000 meters max.  
 MTBF ..... >300,000 hours at full load, 25°C  
   ambient, calculated per SR332

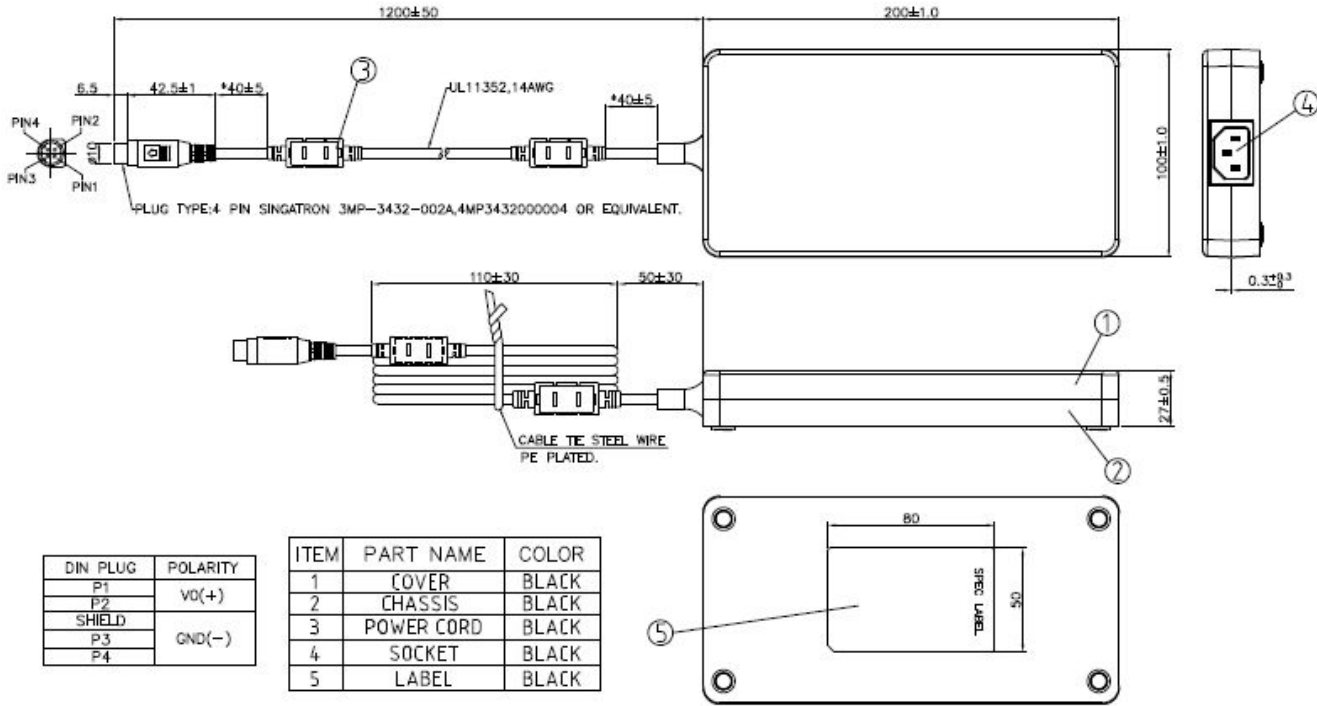
**STANDARDS & COMPLIANCE**

FCC, VCCI ..... Class B conducted & radiated  
 EN 55032, CISPR 32 ..... Class B conducted & radiated  
 EN 61000-3-2 ..... Harmonic distortion, Class D  
 EN 61000-3-3 ..... Line flicker  
 EN 61000-4-2 ..... ESD,  $\pm$ 15KV Air,  $\pm$ 8KV contact  
 EN 61000-4-3 ..... Radiated immunity,  $\pm$ 1KV  
 EN 61000-4-4 ..... Fast transient/burst,  $\pm$ 1KV  
 EN 61000-4-5 ..... Surge,  $\pm$ 1KV diff.,  $\pm$ 2KV com.  
 EN 61000-4-6 ..... Conducted immunity, 3Vrms  
 EN 61000-4-8 ..... Magnetic field immunity, 1A/m  
 EN 61000-4-11 ..... Voltage dips, 30% reduction for 500  
   ms, and >95% reduction for 10 ms  
 Safety Standards ..... EN/IEC 62368-1, UL 62368-1,  
   CSA 22.2 No. 62368-1  
 Agency Approvals ..... TUV, UL, cUL  
 Other Compliance ..... RoHS, DoE Level VI, CoC V5 Tier 2

# TGA330 Series

## 330W GaN FET AC/DC Power Adapters

### MECHANICAL SPECIFICATIONS



#### Notes:

1. Dimensions shown in mm.
2. Weight: 0.75kg (1.65 lbs) approx.
3. DC return is connected to earth ground through an 1K-ohm resistor as standard.
4. Contact TRUMPower for output connector options.