



FEATURES

- IEC 320/C14, C6, or C8 AC Inlet
- GaN FET Based Compact Design
- 10W/in³ High Power Density
- 91-93% Average Efficiency
- Thermal Protection
- Compliant with DoE Level VI
- IEC/EN/UL 62368-1 & 60950-1 Approved



INPUT SPECIFICATIONS

Input Voltage Range 100-240VAC
 Input Frequency 50-60 Hz
 Input Current 2.2A max. @ 100 VAC/240 VAC
 Inrush Current 100A max. @ Full Load,
 at 25°C cold start
 Touch Current 100 µA max. @ 264 VAC
 Leakage Current 350 µA max. @ 264 VAC (Class I),
 250 µA max. @ 264 VAC (Class II)

OUTPUT SPECIFICATIONS

Output Power Ratings See models list
 No Load Power Cons. 0.21W typical
 Line Regulation ±0.5% max.
 Load Regulation ±5% max.
 Ripple and Noise* 1% Vp-p max. of output @ full load
 Over Voltage Protection Set @ 150-180%; Latch off
 Over Current Protection Set @ 150-180%; Auto-recovery
 Short Circuit Protection Shut down; Auto-recovery
 Over Temp. Protection Shut down; Latch off
 Thermal Shutdown Protected to over-temp. conditions
 Temperature Coefficient ±0.04%/°C max.
 Transient Response 0.5 ms for 50% load change typical

* Measured with 20MHz bandwidth at nominal line voltage and full load, with a 47µF low ESR electrolytic capacitor in parallel with a 0.1µF multilayer capacitor in parallel across the output.

GENERAL SPECIFICATIONS

Power Factor >0.92 typical @ full load
 Efficiency 90% min. @ full load
 Switching Frequency 250 kHz.
 Hold-Up Time 10 ms min. @ full load
 Operating Altitude 5,000 meters max.
 Operating Temperature 0°C to +70°C
 Derating Derate from 100% at +40°C
 linearly to 50% at +70°C except 50%
 at +60°C for 12V
 Storage Temperature -20°C to +80°C
 Operating Humidity 20 to 80% non-condensing
 Storage Humidity 10 to 90% non-condensing
 Withstand Voltage 3,000 VAC, input to output
 MTBF 300,000 hours minimum at full load,
 25°C ambient, calculated per
 Telcordia SR-332

MODELS LIST

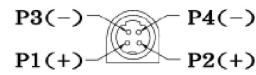
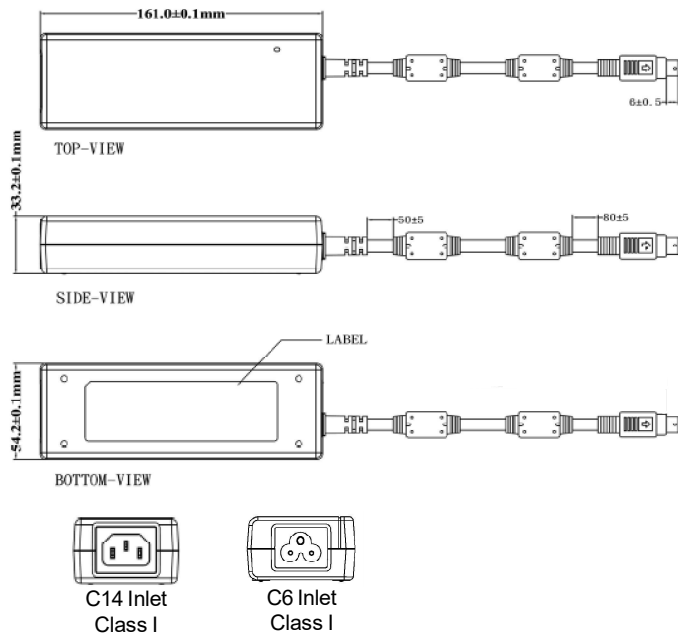
Product No. ⁽¹⁾	Output Voltage	Maximum Output Current	Maximum Output Power
TTG160-12	12V	12.5A	150W
TTG160-19	19V	8.4A	160W
TTG160-24	24V	6.6A	160W
TTG160-48	48V	3.3A	160W
TTG160-56	56V	2.86A	160W

Note:
 1) Add suffix "-4" to the P/N for models furnished with IEC 320/C14 AC inlet, "-6" for C6 inlet, "-8" for C8 inlet, e.g. TTG160-12-4, TTG160-12-6, TTG160-12-8, etc.

STANDARDS & COMPLIANCE

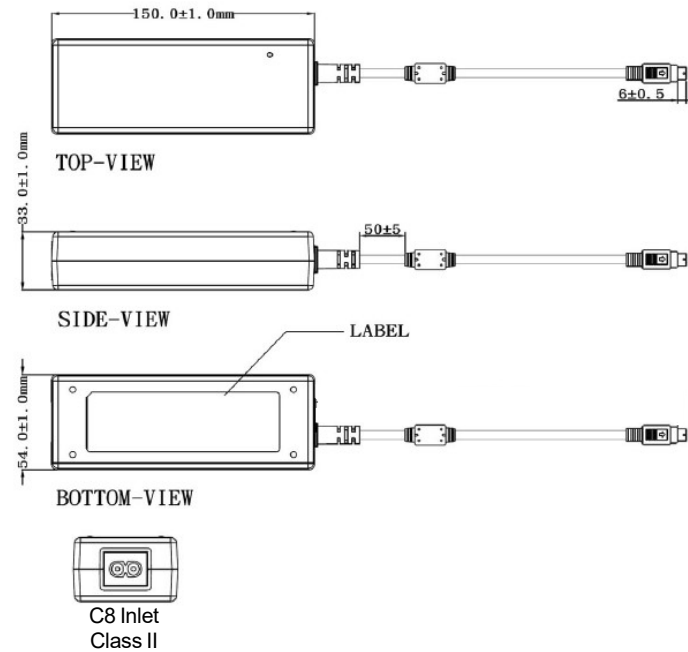
EN 55032, CISPR 32 Class B, conducted & radiated
 FCC, VCCI Class B, conducted & radiated
 EN 61000-3-2 Harmonic distortion, Class A & D
 EN 61000-3-3 Line flicker
 EN 61000-4-2 ESD, ±8 KV air and ±4 KV contact
 EN 61000-4-3 Radiated immunity, 3V/m
 EN 61000-4-4 Fast transient/burst, ±1 KV
 EN 61000-4-5 Surge, ±1 KV diff., ±2 KV com.
 EN 61000-4-6 Conducted immunity, 3 Vrms
 EN 61000-4-8 Magnetic field immunity, 1A/m
 EN 61000-4-11 Voltage dip immunity,
 30% reduction for 500ms,
 >95% reduction for 10ms
 Safety Standards IEC/EN/UL 62368-1:2014,
 CAN/CSA C22.2 No. 62368-1-14,
 IEC/EN/UL 60950-1 (2nd edition)
 Agency Approvals UL, cUL, TUV, PSE, CE, CB
 Other Compliance RoHS, Energy Star 2.0, ErP Stage 2,
 DoE Level VI, CoC Tier 2, NRCan &
 GEMS Level VI

MECHANICAL SPECIFICATIONS



OUTPUT CONNECTOR	
PIN	CONNECTION
1	+V
2	+V
3	RETURN
4	RETURN
SHELL	AC GND/*NC

*Shell is NC on C8 inlet models.



Notes:

1. Unit: mm
2. Weight: 500 grams approx.
3. Standard output connector: Kycon P/N KPPX-4P or equivalent, mating with Kycon P/N KPJX-4S-S or equivalent
4. Length of output cable: 1200±50mm for 12V, 1500±50mm for 19-56V
5. Contact TRUMPower for non-standard models.