TEG300 Series
GaN-Based 300 Watts Power Adapters

FEATURES
- GaN FET Based Compact Design
- 9.03 W/in³ High Power Density
- 91-93% Average Efficiency
- IEC 320/C14 or IEC 320/C18 Inlet
- 5,000m Operating Altitude
- Energy Efficiency Level VI & CoC Tier 2
- IEC/EN/UL 62368-1 Approved

INPUT SPECIFICATIONS
Input Voltage Range ............ 100-240 VAC
Input Frequency ................... 50-60 Hz
Input Current ........................ 3.5A max. @ 100 VAC/240 VAC
Inrush Current ...................... 150A max. @ full load, at 25°C cold start
Touch Current ...................... 250 µA max. @ 264 VAC (C18 inlet)
Leakage Current .................. 350 µA max. @ 264 VAC (C14 inlet)

OUTPUT SPECIFICATIONS
Output Power Ratings .......... See models list
No Load Power Cons. .............. 0.5W 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% max.; Latch off
Over Current Protection ..... Set @ 180% max.; Auto-recovery
Short Circuit Protection .... Shut down; Auto-recovery
Thermal Shutdown ............... Protected to over-temp. conditions
Temperature Coefficient ...... ±0.04%/°C max.
Transient Response .......... 0.5 ms for 50% load change typical

GENERAL SPECIFICATIONS
Power Factor .................... >0.9 typical @ 115 VAC
Efficiency .......................... 88% min. @ full load
Switching Frequency ............ 250 KHz.
Hold-Up Time .................... 10 ms min. @ full load
Operating Altitude ............... 5,000 meters max.
Operating Temperature .......... -20°C to +40°C
Derating .......................... Derate from 100% at +40°C linearly to 50% at +60°C
Storage Temperature .......... -20°C to +80°C
Operating Humidity .......... 20% to 80%, non-condensing
Storage Humidity ............ 10% to 90%, non-condensing
Withstand Voltage ............ 4,242 VDC, input to output
2,500 VDC, input to ground
MTBF ............................. 300,000 hours minimum at full load, 25°C ambient, calculated per Telcordia SR-332

MODELS LIST

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Output Voltage</th>
<th>Maximum Output Current</th>
<th>Maximum Output Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTG300-12</td>
<td>12V</td>
<td>24A</td>
<td>288W</td>
</tr>
<tr>
<td>TTG300-15</td>
<td>15V</td>
<td>20A</td>
<td>300W</td>
</tr>
<tr>
<td>TTG300-19</td>
<td>19V</td>
<td>15.79A</td>
<td>300W</td>
</tr>
<tr>
<td>TTG300-24</td>
<td>24V</td>
<td>12.5A</td>
<td>300W</td>
</tr>
<tr>
<td>TTG300-48</td>
<td>48V</td>
<td>6.25A</td>
<td>300W</td>
</tr>
<tr>
<td>TTG300-56</td>
<td>56V</td>
<td>5.36A</td>
<td>300W</td>
</tr>
</tbody>
</table>

Note:
1) Add suffix "-4" to the P/N for models furnished with IEC 320/C14 AC inlet, "-F" for C18 inlet, e.g. TTG300-12-4, TTG300-12-F, etc.

STANDARDS & COMPLIANCE
EN 55032, CISPR 32 ...... Class B, conducted & radiated
FCC, VCCI ................ Class B, conducted & radiated
EN 61000-3-2 .............. Harmonic distortion, Class D
EN 61000-3-3 .............. Line flicker
EN 55024 .................... Immunity Standard
EN 61000-4-2 ......... ESD, ±8 KV air and ±4 KV contact
EN 61000-4-3 ......... Radiated immunity, 3 V/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, 1 A/m
EN 61000-4-11 .......... Voltage dips,
30% reduction for 500ms,
>95% reduction for 10ms
Safety Standards .......... IEC/EN/UL 62368-1
Agency Approvals .......... UL, cUL, TUV/GS, 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

Notes:
1. Unit: mm
2. Weight: 1,100 grams approx.
3. Length of output cable: 1000mm for 12V & 15V models, 1200mm for 24V-56V models.
5. Mating connector: Molex P/N: 39-01-2066 with male terminal #5558, #5566, #5569 or equivalent.
6. Contact us for output connector options.