TDM20 Series
20 Watts Medical Grade Wallmount Power Adapters

FEATURES
- Single 5V to 48V, 20W DC Output Power
- Fixed US, EU & UK AC Plugs
- Class II with 2 X MOPP
- Approved to IEC/EN/UL 60601-1 Edition 3.1
- 0.075W Max. No Load Power Consumption
- DOE/GEMS Level VI & ErP Stage II Compliant

INPUT SPECIFICATIONS
Input Voltage Range .............. 90-264 VAC
Input Frequency ..................... 50-60 Hz
Input Current ....................... 0.45-0.27A rms
Inrush Current ....................... 50A @ 100 VAC, 60A @ 230VAC at 25°C cold start
Touch Current ....................... 100 µA max.
No Load Input Power ............... 0.75W max.

OUTPUT SPECIFICATIONS
Output Power Ratings .......... See table
Line Regulation .................... ±1% max.
Load Regulation .................... ±5% max.
Ripple and Noise* ............... 1% Vp-p max.
Over Voltage Protection ........... Shut down
Short Circuit Protection .......... Shut down; Auto-recovery
Over Current Protection .......... Shutdown, Auto-recovery
Temperature Coefficient ....... ±0.04%/°C max.
Transient Response .............. 0.5 ms @ 50% load change

* 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.

STANDARDS & COMPLIANCE
IEC/EN 60601-1-2:2014 ....... EMC & Immunity Performance
EN 55011, CISPR 11, FCC .... Class B, conducted & radiated
EN 61000-3-2 .................. Harmonic distortion, Class A
EN 61000-3-3 .................. Line fluctuations & flicker
EN 61000-4-2 .................. ESD, ±15 KV air and ±8 KV contact
EN 61000-4-3 .................. Radiated immunity, 10V/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, 6 Vrms
EN 61000-4-8 .................. Magnetic field immunity, 30A/m
EN 61000-4-11 ................. Voltage dip immunity, 30% reduction for 500ms, 60% reduction for 100ms, >95% reduction for 10ms
Agency Approvals .............. UL, cUL, CE, CB, TUV/GS, PSE
Other Compliance .............. RoHS, DOE/GEMS Level VI, ErP Stage II

GENERAL SPECIFICATIONS
Efficiency ....................... 85.5% min. @ full load
Hold-up Time ...................... 10 ms @ full load
Operating Temperature ........ 0°C to +40°C
Storage Temperature .......... -20°C to +80°C
Operating Humidity .......... 20% to 80% non-condensing
Storage Humidity ............ 10% to 90% non-condensing
Withstand Voltage ............. 4,000 VAC, input-output, 2 MOPP
MTBF ............... 300 Khrs minimum at full load, 25°C ambient, calculated per Telecordia SR-332

MODELS LIST

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Output Voltage</th>
<th>Maximum Current</th>
<th>Maximum Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDM20-5-X</td>
<td>5V</td>
<td>3.5A</td>
<td>17.5W</td>
</tr>
<tr>
<td>TDM20-5.9-X</td>
<td>5.9V</td>
<td>3A</td>
<td>17.7W</td>
</tr>
<tr>
<td>TDM20-9-X</td>
<td>9V</td>
<td>2.22A</td>
<td>20W</td>
</tr>
<tr>
<td>TDM20-12-X</td>
<td>12V</td>
<td>1.67A</td>
<td>20W</td>
</tr>
<tr>
<td>TDM20-15-X</td>
<td>15V</td>
<td>1.33A</td>
<td>20W</td>
</tr>
<tr>
<td>TDM20-18-X</td>
<td>18V</td>
<td>1.11A</td>
<td>20W</td>
</tr>
<tr>
<td>TDM20-24-X</td>
<td>24V</td>
<td>0.83A</td>
<td>20W</td>
</tr>
<tr>
<td>TDM20-48-X</td>
<td>48V</td>
<td>0.42A</td>
<td>20W</td>
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</table>

Note: X = AC plug code

<table>
<thead>
<tr>
<th>Code X</th>
<th>Designation/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>U</td>
<td>Fixed US Plug</td>
</tr>
<tr>
<td>E</td>
<td>Fixed EU Plug</td>
</tr>
<tr>
<td>B</td>
<td>Fixed UK Plug</td>
</tr>
</tbody>
</table>
MECHANICAL SPECIFICATIONS

Fixed US Plug

Fixed EU Plug

Fixed UK Plug

Notes:
1. Unit: mm
2. Weight: 170g (0.38 lbs) approx.
3. Color: Black (standard)
4. Contact TRUMPower for output connector options.