TMA200 Series
200W Medical Power Adapters

FEATURES
- 90–264 VAC Universal Input
- 200W Continuous Power
- 0.9 Active Power Factor
- Thermally-Controlled Cooling Fan
- No Load Power Consumption < 0.5W

ELECTRICAL SPECIFICATIONS

- Input Voltage: 90~264 VAC
- Rated Input Voltage: 100~240 VAC
- Input Frequency: 47~63 Hz
- Input Current: 3A (rms) @ 90 VAC, 1.5A (rms) max. @ 264 VAC
- Earth Leakage Current: 228μA max. @ 264 VAC
- Power Factor: 0.9 min. at full load, 115 VAC/230 VAC
- No Load Power Consumption: 0.5W max.
- Output Voltage: 12V~48V
- Output Current: See table
- Output Power: 200W
- Voltage Regulation: ±5%
- Ripple and Noise: See table

GENERAL SPECIFICATIONS

- Efficiency: 87% min. at avg. load, 115/230 VAC
- Switching Frequency: 56KHz ±5%
- Hold-up Time: 16ms min. typical at full load, 115 VAC
- Operating Temperature: -20°C to +50°C
- Storage Temperature: -20°C to +85°C
- Operating Humidity: 10% to 95%
- Short-Circuit Protection: Auto-recovery
- Over-Load Protection: Auto-recovery
- Over-Voltage Protection: Latch, AC recycle
- Withstand Voltage: 5656VDC from input to output, 2121VDC from input to ground
- MTBF: 140K hrs minimum at full load and 25°C ambient, calculated per MIL-HDBK-217F

STANDARDS & COMPLIANCES

- EMC Standards: EN60601-1-2, EN55011 Class B, FCC Part 18 Class B
- Safety Standards: UL60601-1, EN60601-1, CSA C22.2 No. 60601-1, IEC60601-1
- Agency Approvals: UL, cUL, TUV, CB, CE
- Other Compliances: RoHS, CEC Level V, EISA, Energy Star Level V

MODELS LIST

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<tbody>
<tr>
<td>TMA200-12</td>
<td>12V</td>
<td>16.66A</td>
<td>240mV</td>
<td>200W</td>
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<tr>
<td>TMA200-16</td>
<td>16V</td>
<td>12.50A</td>
<td>300mV</td>
<td>200W</td>
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<tr>
<td>TMA200-19</td>
<td>19V</td>
<td>10.53A</td>
<td>300mV</td>
<td>200W</td>
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<tr>
<td>TMA200-20</td>
<td>20V</td>
<td>10A</td>
<td>300mV</td>
<td>200W</td>
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<tr>
<td>TMA200-24</td>
<td>24V</td>
<td>8.33A</td>
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<td>TMA200-36</td>
<td>36V</td>
<td>5.555A</td>
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<td>200W</td>
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<td>TMA200-48</td>
<td>48V</td>
<td>4.166A</td>
<td>300mV</td>
<td>200W</td>
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* Peak-to-peak with 20MHz bandwidth with a tantalum 10μF in parallel with 0.1μF ceramic capacitor.

MECHANICAL SPECIFICATIONS

- Standard Output Connector: 4-pin DIN connector.
- Contact TRUMPower for other output connector options.

OUTPUT CONNECTOR & PINOUT

Notes:
1. Dimensions: mm
2. AC Inlet: IEC320/C14 standard
3. Tolerance: ±0.5mm
4. Standard Output Cable: D643 (AWM 2464 #16AWG/4C + Shielding, UL 80°C 300V VW-1, 1000±30mm minimum)
5. Weight: 1060 grams