Configurable Power Solution
400W Fan-less Modular Power Supply – UMP-400 Series

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Fan-less Modular PSU New Product Introduction –UMP-400 Series

Key Selling Points of UMP400

- Entry level 400w modular power supply, **1U slim** design.
- Fan-less design, fits **enclosed** system or system **without convection cooling**.
- Plug in NID module cards to create a **multiple output rail** power unit.
- UMP-400 and NID D/D module cards can be sold separately.
- Safety: **62368-1 certified**, design refer to 60601-1 medical regulations & **2x MOPP** insulation.
- Protections: SCP, OLP, OVP, OTP.
- Operating temperature: **-30~+70C**
## Advantages of Fan-less Cooling

<table>
<thead>
<tr>
<th>Traditional Cooling Method</th>
<th>New Cooling Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Among all components, due to accumulated dust or critical operating environment, cooler(s) tend to have problems of shortest MTBF/Lowest Reliability.</td>
<td>• Fan-less cooling effectively prolongs product life of PSU and end system.</td>
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<td>• In long term operation, PSU inevitably intakes dust or particles that results in PSU failure which is also a risk to system crash.</td>
<td>• Lower system maintenance cost.</td>
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<tr>
<td>• Cause Annoying Acoustic Noise</td>
<td>• Eliminate unwanted acoustic noise.</td>
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</tbody>
</table>
MEAN WELL offer enhanced cooling method. Besides convection thru aluminum case of the PSU, extra aluminum plate can be added to enhance cooling effect and elevate the range of operating temperature. In return, prompt to more opportunity of applications in various end systems.
Flexible Solutions By Modular Design

UMP-400 main outputs:
24/48Vdc

NID35/65/100 output voltages:
5V, 12V, 15V, 24V, -5V, -12V, 15V

Power solutions > 3 thousand Combinations!

<table>
<thead>
<tr>
<th>DC-DC O/P Module</th>
<th>Photo</th>
<th>O/P Voltage</th>
<th>O/P Current</th>
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<tbody>
<tr>
<td>A</td>
<td>NID35-05</td>
<td>5V</td>
<td>3.5A</td>
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<tr>
<td>B</td>
<td>NID35-12</td>
<td>12V</td>
<td>2.9A</td>
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<tr>
<td>C</td>
<td>NID35-15</td>
<td>15V</td>
<td>2.4A</td>
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<td>D</td>
<td>NID35-24</td>
<td>24V</td>
<td>1.5A</td>
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<tr>
<td>E</td>
<td>NID65-05</td>
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<td>F</td>
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<td>12V</td>
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<td>G</td>
<td>NID65-15</td>
<td>15V</td>
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<td>H</td>
<td>NID65-24</td>
<td>24V</td>
<td>2.7A</td>
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<td>I</td>
<td>NID100-05</td>
<td>5V</td>
<td>8.0A</td>
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<tr>
<td>J</td>
<td>NID100-12</td>
<td>12V</td>
<td>6.0A</td>
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<td>K</td>
<td>NID100-15</td>
<td>15V</td>
<td>5.2A</td>
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<td>L</td>
<td>NID100-24</td>
<td>24V</td>
<td>3.4A</td>
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<td>M</td>
<td>NID35-05</td>
<td>-5V</td>
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<td>N</td>
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Safety Compliance

• 62368-1 ITE certified & Design refer to 60601-1 medical regulations
  Widest range of product application

• 2x MOPP Medical Insulation
  (Means of Patient Protection)

• Low Touch Current
  <100uA @264Vac

Effectively protect patients from the risk of fatal electric shock!
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Applications of UMP-400 Series

Kiosks
- **Self Check-in Machine for transportation**
  - No Fan Cooling
  - Enclosed Chassis
  - Drive Display, Printer, and Scanner

Self-service machine for Casino
- No Fan Cooling
- Enclosed Chassis
- Drive Display, Printer, and Scanner

Healthcare
- **Medical Instruments**
  - Silent operation
  - Space Constraint
  - 60601-1 & 2x MOPP

Industrial
- **3D Printer**
  - No Cooling Fan
  - Space Constraint
  - Drive Motor & Control Signals

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WHY MEAN WELL

Products
More than 10,000 models, continues to introduce 10% new models and EOL 5% every year

Quality
High reliability and quality indicator
Post-sales failure rate decreases by 10% each year

Cost
High cost-performance products, stable material price, complete supply chain integration

Delivery
24-hour delivery for small amount order.
14-day delivery for frequent purchase standard products.

Service
MEAN WELL Group and distributors provide services 24 hours a day, and commit to reply within 24 hours

Reliable Relationship
75% of revenue come from long-term distributors and customers