POWERMASTER
36V & 48V DIGITAL BATTERY CHARGER

- 3 LED Display
- Short-circuit Protection
- Overload protection
- Reverse polarity or short circuit will activate a protection circuit.
  The protection circuit or charger unit can still be damaged if the fault condition is frequently repeated. Reverse polarity and short circuit is not covered under the warranty.
- Automatic multi-rate charging function
- Over load current protection
- Fans are controlled by floating voltage (with 2Amp (12Vdc), 6Amp (12Vdc), 1Amp (24Vdc) and 4Amp (24Vdc), cooling fans are controlled by temperature -45 °C).
- Temperature protection
- Over charge protection
- Charging curve selection
- High frequency and high efficiency design
- Charger for Lead-Acid Batteries

<table>
<thead>
<tr>
<th>Model</th>
<th>PM-DBC-0436F</th>
<th>PM-DBC-0936D</th>
<th>PM-DBC-1136D</th>
<th>PM-DBC-1536D</th>
<th>PM-DBC-3030D</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUTPUT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td>4A</td>
<td>8A</td>
<td>9A</td>
<td>11A</td>
<td>15A</td>
</tr>
<tr>
<td>Equalizer</td>
<td>43.2V +/-0.1V</td>
<td>43.2V</td>
<td>43.2V</td>
<td>43.2V +/-0.1V</td>
<td></td>
</tr>
<tr>
<td>Charge</td>
<td>+/-0.2V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Float</td>
<td>40.8V +/-0.1V</td>
<td>40.8V</td>
<td>40.8V</td>
<td>40.8V +/-0.1V</td>
<td></td>
</tr>
<tr>
<td>Charge</td>
<td>+/-0.2V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>&gt;87% (at full load)</td>
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<td></td>
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<tr>
<td>INPUT</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Voltage</td>
<td>110V &amp; 220V</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>47 ~ 63 Hz</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROTECTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery Reverse</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short Circuit</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overload</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling Fan</td>
<td>Fans are controlled by floating voltage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INDICATORS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LED</td>
<td>3LED Display: Red (power), green (floating charge), orange (equalizer group)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCD</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Current Meter</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>172x114x54mm</td>
<td>192x131x65mm</td>
<td>196x170x79mm</td>
<td>251x170x79mm</td>
<td>220x51x485mm</td>
</tr>
<tr>
<td>(LxWxH)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>1kg</td>
<td>1.5kg</td>
<td>2kg</td>
<td>2.5kg</td>
<td>9.6kg</td>
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<tr>
<td>O/P Wires or Terminal</td>
<td>4A~9A: Alligator Clips. Other models: Terminal</td>
<td></td>
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</tr>
</tbody>
</table>

FRONT VIEW

BACK VIEW
POWERMASTER
36V & 48V DIGITAL BATTERY CHARGER

(WITHOUT TIMER & PRE-CHARGE) CHARGING CURVE

Start Charging
Charging Voltage
100 Charging Current
Charging Current
100% 10%
Stage 1 Constant Current
Stage 2 Constant Current
Stage 2 Float
Green
LED Indicate

(WITH TIMER & PRE-CHARGE) CHARGING CURVE

Start Charging
Charging Voltage
100 Charging Current Timer start counting
Charging Current
50% Charging Current
Pre-charge (with timer)
LED Indicate
Stage 1Constant Current
Stage 2 Constant Current
Stage 3 Constant Voltage
Stage 4 Float
Green

Model | PM-DBC-0348DF | PM-DBC-0648F | PM-DBC-0748DF | PM-DBC-0848D | PM-DBC-1148D | PM-DBC-2248D
--- | --- | --- | --- | --- | --- | ---
**OUTPUT**
Voltage | 48V
Current | 3A | 6A | 7A | 8A | 11A | 22A
Equalizer Charge | 57.6V +/-0.1V | 57.6V +/-0.2V | 57.6V +/-0.1V
Float Charge | 54.4V +/-0.1V | 54.4V +/-0.2V | 54.4V +/-0.1V
Efficiency | >87% (at full load)

**INPUT**
Voltage | 110V & 220V
Frequency | (110V or 220V)
47 – 63 Hz

**PROTECTION**
Battery Reverse | YES
Short Circuit | YES
Overload | YES
Temperature | YES
Cooling Fan | Fans are controlled by floating voltage

**INDICATORS**
LED | 3LED Display: Red (power), green (floating charge), orange (equalizer group)
LCD | YES
Current Meter | YES

**SIZE**
Dimensions (LxWxH) | 172x114x54mm | 192x131x65mm | 196x170x79mm | 251x170x79mm | 220x51x485mm | 479x356x85mm
Weight | 1kg | 1.5kg | 2kg | 2.5kg | 9.6kg | 8.5kg

O/P Wires or Terminal | 3A~7A: Alligator Clips. Other models: Terminal

PM-DBC-0936D
PM-DBC-0748D
PM-DBC-0436DF
PM-DBC-0348DF
PM-DBC-0936D
PM-DBC-0748D
PM-DBC-2248D
PM-DBC-0348DF