DC-PC WhisperPower DC PowerCube
Battery Charger/Power Supply • Power part of the GENVERTER DC-system

All-in-one
• Diesel powered battery charger
• Utility/ Shore powered battery charger

Powerfully electronically regulated switch - mode battery charger/ power supply. Connectable to our 1/2/3 Cylinder GENVERTER diesel generator. Second input shore/land power 90-264 VAC, 50 or 60 Hz. For 24 or 48 VDC batteries.

- High power: 4.5 kW/ 150 A (24V) diesel battery charging (24 VDC)
- High Power 3.5 kW/ 120 A (24V) battery charging when connected to shore/land
- 2nd DC output to charge auxiliary battery (20 A, multi-step)
- Wide input voltage range (when connected to land power 90-264 VAC, 45-65 Hz)
- 3-step charge characteristic with temperature sensor
- Fully automatic, in diesel mode: variable speed regulation with automatic switch-off
- Suitable to charge open lead acid, GEL, AGM and Li –Ion batteries
- For commercial and recreational applications

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**Features:**
- High efficiency (>90%)
- Easy installation (plug and play)
- Can be paralleled with 2nd DC PowerCube (9 kW)
- WhisperConnect (CANbus) connection

**Technical specifications**

- **Temperature compensation:** -30 mV/°C - 60 mV/°C
- **Supported battery types:** Open and sealed lead acid: Gel / Traction / AGM / Spiral and Lithium-ion
- **Battery leakage current:** <5mA per battery
- **Charge voltages**
  - AGM / GEL at 25°C: 28.80 VDC, 28.50 VDC, 27.20 VDC
  - Traction at 25°C: 29.20 VDC, 28.90 VDC, 26.50 VDC
  - Open lead acid at 25°C: 28.50 VDC, 28.50 VDC, 26.50 VDC
  - Lithium ION at 25°C: 28.80 VDC, 27.50 VDC, 26.50 VDC
- **Return current from absorption to float:** 6% of Imax
- **PowerCube status on/off:** Digital output (relay, two-way contact)
- **Failure:** Digital output (relay, two-way contact)
- **AC grid disabled:** Digital input (potential free input, closed is disabled)
- **PM grid disabled:** Digital input (potential free input, closed is disabled)
- **Conformity:**
  - Directive EMC: 2004/108/EC: EN 61000-6-1, EN 61000-6-3, EN 55014, EN 55022, EN 61000-3-2, EN 62040-2
  - Low voltage directive: 2006/95/EC: EN 62040-1-1, EN 50091-2, EN 60950-1
- **Protection:**
  - PM input isolation protection: Yes (open collector output 30 VDC, 100mA)
  - Over temperature protection: Yes, derating above 40°C, shutdown at high temperatures, with automatic restart after cooling down
  - Overvoltage protection: manual restart needed, 36 VDC +/- 0.5 VDC, 68 VDC +/- 0.5 VDC
- **Ingress Protection index:** IP21
- **Mechanical specifications**
  - Main battery connection: 2 x M10 studs
  - Slave battery connection: 1 x M6 stud
  - Earth grounding lug: 1 x M6 stud
  - AC grid input: 3 x M3 screw terminal block
  - PM grid input: 3 x M3 screw terminal block
  - Remote control panel: RJ12
  - Battery temperature sensor: RJ12
  - Whisper Connect CANbus: RJ45
- **Voltage sensor:** Phoenix MSTB 2.52 - ST 5.08
- **Digital outputs:** 6 x transistors (6.3A)
- **Digital inputs:** 4 x factors (6.3A)
- **Dimension height [mm]:** 0.75x21x316
- **Operating temperature range:** -20 - 55°C (derating above 40°C)
- **Relative humidity in operation:** up to 95% without condensation
- **Ventilation:** Combined cooling (convection and forced, variable speed)
- **Weight:** 21 kg, 21 kg
- **Accessories:** Battery temperature sensor and remote control panel

**Model name**
- WP-DC PowerCube 24/150
- WP-DC PowerCube 48/100

**General specifications**

- **Model number / Product type:**
  - WP-DC PowerCube 24/150 60202002 / Battery charger
  - WP-DC PowerCube 48/100 60202003 / Battery charger
- **Nominal battery voltage:** 24 VDC, 48 VDC
- **Output current:** 0 - 150A (short circuit protected), 0 - 100A (short circuit protected)
- **Output voltage:** 26.5/28.5 VDC, 43.0/47.0 VDC
- **Recommended battery capacity:** 300 to 1500 Ah, 200 to 1000 Ah
- **Charge characteristic:** 3+ step charge characteristic
- **Slave charger:** 12V-2SA (3+ step charge characteristic) short circuit protected

**Input specifications**

- **Grid input voltage range:** 90-264VAC (45-65Hz)
- **Input current:** Adjustable, from 2A to 16A
- **Power factor (cos phi):** > 0.9
- **PM generator input range:** 80-300VAC (30-500Hz)
- **Input current:** Adjustable, from 2A to 14.5A
- **Power factor (cos phi):** > 0.85
- **Power Factor Correction (PFC):** EN 61000-3-2

**Battery specifications**

- **Model name:** WP-DC PowerCube
- **Model number / Product type:**
  - WP-DC PowerCube 24/150 60202002 / Battery charger
  - WP-DC PowerCube 48/100 60202003 / Battery charger
- **Nominal battery voltage:** 24 VDC, 48 VDC
- **Output current:** 0-150A (short circuit protected), 0-100A (short circuit protected)
- **Output voltage:** 26.5/28.5 VDC, 43.0/47.0 VDC
- **Recommended battery capacity:** 300 to 1500 Ah, 200 to 1000 Ah
- **Charge characteristic:** 3+ step charge characteristic

**Technical specifications**

- **Temperature compensation:** -30 mV/°C - 60 mV/°C
- **Supported battery types:** Open and sealed lead acid: Gel / Traction / AGM / Spiral and Lithium-ion
- **Battery leakage current:** <5mA per battery
- **Charge voltages**
  - AGM / GEL at 25°C: 28.80 VDC, 28.50 VDC, 27.20 VDC
  - Traction at 25°C: 29.20 VDC, 28.90 VDC, 26.50 VDC
  - Open lead acid at 25°C: 28.50 VDC, 28.50 VDC, 26.50 VDC
  - Lithium ION at 25°C: 28.80 VDC, 27.50 VDC, 26.50 VDC
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