ALVOLTA
BUILT FOR POWER



ALVOLTA LUNA-ORBIT 50A DC-DC CHARGER + 50A MPPT

ALV-MPPTDC50

Key Features:

- 98% MPPT Conversion Efficiency
- Highly-Efficient DC-DC Charging
- Supports Various Battery Chemistries
- Built-in Bluetooth
- Advanced Safety Features

Suitable for:

3 YEAR WARRANTY

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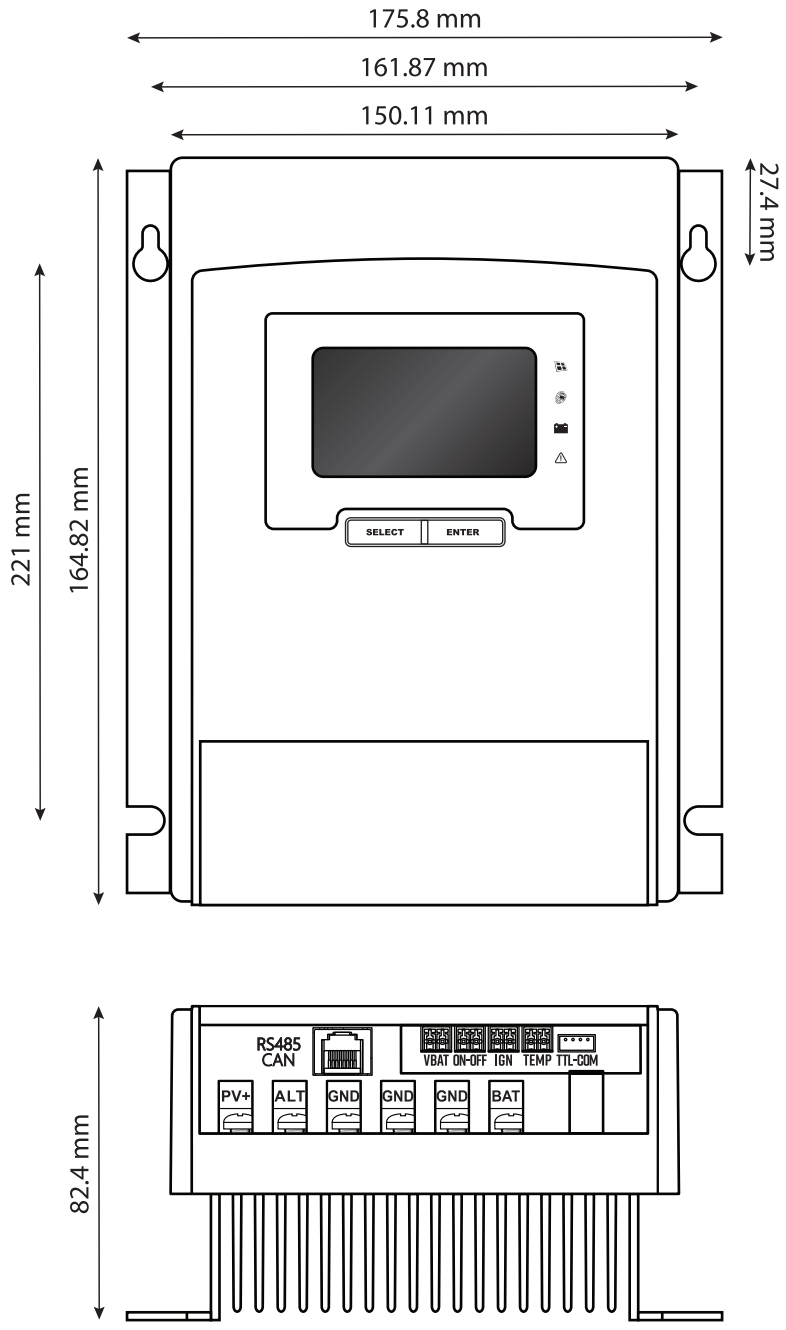
Specifications:

Battery	
Backup Battery System Voltage	12V
Backup Battery Voltage Range	9 - 16V DC
Compatible Battery Types	Lithium, Sealed Lead-acid, Gel, Vented and User-defined Batteries
Rated Charging Current	50A
Connection Type	25-6mm Cable Lug
Maximum Cable Size	20mm² (4AWG)
MPPT	
Maximum PV Input Voltage	55V DC
Maximum PV Input Current	50A
Solar Panel Charging Mode	Buck MPPT
MPPT Efficiency	> 99%
Recommended PV Input Power	700W
PV Starter Battery Charging Voltage	Generator startup charging voltage 0.2V
PV Starter Battery Charging Current	≤ 10A at 12V, ≤5A at 24V
Alternator	
Alternator (Starter) Battery System Voltage	12 / 24V
Starter Battery Type	Lead-Acid
Maximum Alternator Input Voltage	32V DC
Maximum Alternator Input Current	65A
Traditional Alternator Voltage Range	13.2 - 16V DC / 26.4 - 32V DC
Intelligent Alternator Voltage Range	12 - 16V DC / 24 - 32V DC
Alternator Charging Mode	Buck, Boost
Recommended Alternator Power Output	700W (12V backup battery)
No-load Loss	< 1.1W
Maximum Charging Conversion Efficiency	96%
General	
Temperature Compensation Factor	-3mV / °C/2V (for lead-acid batteries only)
Communication	Bluetooth, TTL, RS485 and CAN (RV-C)
Operating Temperature Range	-35°C - +65°C
Ingress Protection	IP32
Altitude	≤ 3000m
Colour	Black
Dimensions (w x h x d)	221 x 175.8 x 92.4mm
Weight	2.34kg
Warranty	3 Years
Protection Features	Over-charging, Over-current, Over-temperature, Alternator Reverse-connection, Solar Panel Reverse-connection, Backup Battery Reverse-connection, Anti-reverse Charging at Night

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Model Dimensions:



- Mounting hole size: 4.5mm

*All data and specifications provided in this datasheet are tested under standard test conditions, and may deviate marginally from actual values. Alvolta and its associates reserve the right to make modifications to the provided information without notice. Alvolta maintains the goal to supply customers with the most recent information regarding its products.