POWER, CLIMATE AND ENERGY

WeVolt C-Series eAPU Components

PRODUCT SPECIFICATIONS

5 CORE COMPONENTS



AUXILIARY LiFePO4 BATTERY





TRUCK PARKING A/C



BIDIRECTIONAL DC/DC



PURE SINE WAVE INVERTER



AIR & WATER HEATER

C-Series component portfolio

Auxiliary energy, cab climate and appliance power

314 Ah
LiFePO4 CAPACITY
25.6 V nominal

50A / 100A
TWO-WAY CHARGING
Forward / reverse

3 kW
PURE SINE WAVE
6,000 W surge

Models, electrical performance and operating specifications

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C-Series product pages

E-APU component portfolio

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C-SERIES / POWER, CLIMATE AND ENERGY

01 / AUXILIARY ENERGY

Auxiliary LiFePO4 Battery

WTTB-24V-314Ah



25.6 V
NOMINAL VOLTAGE
314 Ah capacity

8.038 kWh
NOMINAL ENERGY
8,038 Wh

IP65
ENCLOSURE PROTECTION
LiFePO4 house battery

Bluetooth and RS-485

Active balancing and heating

ELECTRICAL PERFORMANCE

SPECIFICATION	VALUE
Nominal voltage	**25.6 V**
Operating voltage range	**20-29.2 V**
Nominal capacity	**314 Ah**
Nominal energy	**8,038 Wh**
Recommended charge current	**100 A**
Maximum charge current	**150 A**
Continuous discharge current	**157 A**
Short-duration discharge current	**200 A for 30 s**
Short-duration discharge current	**300 A for 10 s**
Surge discharge current[2]	**1200 A for 1 s**

Short-duration discharge current: 200 A / 30 s; 300 A / 10 s
Published surge limit: 1200 A / 1 s;

01 / BATTERY SPECIFICATIONS

Battery operating settings & physical specifications

WTTB-24V-314Ah

CHARGING & DISCHARGING

SPECIFICATION	VALUE
Bulk / absorption voltage	**29.2 V**
Float voltage	**28 V or off**
BMS high-voltage cut-off	**29.2 V**
Recommended discharge cut-off	**22.4 V**
BMS low-voltage cut-off	**20.8 V**
BMS voltage recovery	**21.6 V**
Charging temperature	**0 to +55 °C**
Discharging temperature	**-20 to +60 °C**

PHYSICAL & SYSTEM

SPECIFICATION	VALUE
Dimensions (L × W × H)	**505 × 345 × 230 mm**
Weight	**Approx. 63 kg**
Enclosure	**Powder-coated steel**
Terminal type	**Bulkhead terminals**
Series connection	**Not supported**
Parallel connection	**Supported**
Bluetooth	**Supported**
RS-485	**Supported**
Active cell balancing	**Yes**
Heating function	**Yes**

Dimensions are L × W × H. Series connection is not supported.
Charging range is 0 to +55 °C, including products with heating.

01 / BATTERY CONSTRUCTION

Battery construction & BMS protection

WTTB-24V-314Ah

CELL & PACK SPECIFICATIONS

SPECIFICATION	VALUE
Cell chemistry	**LiFePO4**
Cell type / configuration	**Prismatic / 1P8S (8 cells)**
Self-discharge	**1% per month**
Cycle life[1]	**>8,000 cycles**
IP rating	**IP65**

Supplier-rated cycle life

>8,000 cycles

Test conditions and end-of-life criterion were not provided by the supplier.

BMS PROTECTION & CERTIFICATIONS

SPECIFICATION	VALUE
Pack over-voltage	**Yes**
Pack / cell under-voltage	**Yes**
Cell over-temperature	**Yes**
BMS over-temperature	**Yes**
Short circuit / over-current	**Yes**
Cell balancing	**Yes**
Certifications	**Not specified**

Emergency start and service terminal

Force start bypasses part of BMS protection; emergency use only.
The service negative terminal is for maintenance only.

02 / CAB CLIMATE

Truck Parking Air Conditioner

WTAC-24V-10C-5H





24 VDC
RATED VOLTAGE
Cooling + Heating

3,000 W
RATED COOLING
1,200-3,000 W range

1,600 W
RATED HEATING
450 m³/h airflow

KEY SPECIFICATIONS

ELECTRICAL	
Rated Voltage	**24 VDC**
Working Voltage Range	**21.5-32 VDC**
PERFORMANCE	
Rated Cooling Capacity	**3000 W**
Cooling Capacity Range	**1200-3000 W**
Rated Heating Capacity	**1600 W**
Rated Input Power (Cooling / Heating)	**900 W / 1600 W**
Rated Current (Cooling / Heating)	**38.0 A / 66.6 A**
Airflow	**450 m³/h**
OPERATING & PHYSICAL	
Temperature Adjustment Range	**16-32 °C**
Refrigerant	**R-134a**
Refrigerant Charge	**610 g**
Unit Dimensions (Indoor / Outdoor)	**534×315×222 / 682×465×192 mm**
Unit Weight (Indoor / Outdoor)	**11 / 31.5 kg**

03 / BIDIRECTIONAL CHARGING

Bidirectional DC/DC Charger

WTDC-12-24V-50A



50 A
FORWARD CHARGING
29.2 V (CC-CV)

100 A
REVERSE CHARGING
14.4 V (CC-CV)

IP65
PROTECTION RATING
Bidirectional

KEY SPECIFICATIONS

SYSTEM ARCHITECTURE	
Vehicle Side	**12 V Vehicle (AGM/GEL)**
Auxiliary Battery Side	**25.6 V (8S LiFePO4)**
Forward Charging	**29.2 V, 50 A (CC-CV)**
Reverse Charging	**14.4 V, 100 A (CC-CV)**
ELECTRICAL	
Maximum Input Current	**105 A @ Vin=10 V**
Power Efficiency	**96% @ Vin=12 VDC**
CONTROL & PHYSICAL	
Bidirectional Charging	**Yes**
ACC / RMT Control	**ACC forward / RMT reverse; auto when both ON**
Operating Temperature	**-40 to +55 °C**
IP Rating	**IP65**
Dimensions	**200×178×60 mm**
Weight	**≤2.7 kg**

04 / CAB & ENGINE HEATING

Air & Water Parking Heater

WTDH-12V-5KW



5 kW
HEATING OUTPUT
Air + Liquid Heating

12 V
RATED VOLTAGE
9-18 V operating

0.15-0.52
FUEL USE, L/h
30-50 W electrical

KEY SPECIFICATIONS

PERFORMANCE	
Heating Output	**5 kW**
Rated Voltage	**12 V**
Operating Voltage Range	**9-18 V**
Primary Heating Medium	**Air**
FUEL & ELECTRICAL	
Fuel Consumption	**0.15-0.52 L/h**
Rated Electrical Power	**30-50 W**
Pump Power	**18 W**
HEATING FUNCTIONS	
Cabin Air Heating	**Yes**
Liquid / Coolant Heating	**Yes**
Engine Preheating	**Supports coolant circulation preheat**
Main Connection Ports	**Air intake / exhaust outlet / coolant ports**

05 / APPLIANCE POWER

Pure Sine Wave Inverter

IU24-3KW



3 kW
RATED OUTPUT
3,000 W / 3,000 VA

6,000 W
SURGE POWER
Pure Sine Wave

≤60 dB
NOISE
24 VDC input

KEY SPECIFICATIONS

ELECTRICAL INPUT	
Rated Input Voltage	24 VDC
Input Voltage Range	21.6-32.0 VDC
AC OUTPUT	
Rated Output	3000 W / 3000 VA
Surge Power	6000 W
Rated Output Voltage	100 / 110 / 115 / 120 VAC (±3%); default 120 V
Output Frequency	50 / 60 Hz (±0.2%); default 60 Hz
Output Waveform	Pure sine wave
Maximum Output Efficiency	>93%
SYSTEM & PHYSICAL	
Communication	RS485; CAN optional
Protection	Input OVP/UVP; output overload/short-circuit; over-temperature
Operating Temperature	-20 to +60 °C
IP Rating	IP20
Dimensions	409×249×120 mm
Weight	6.5 kg