



DATASHEET: ZCS HIGH VOLTAGE BATTERIES

ZCS PYLONTECH H48050

Technical data

Model	ZCS – Pylontech H48050
Code	ZST-BAT-2,4KWH-H
Technology	Lithium Iron Phosphate
Dimensions (H*L*W)	485mm*435mm*90mm
Weight	24 Kg
Protection class	IP20
Mounting	On rack installed on the ground
Cable kit for connection	Sold separately: ZST-CABLE-PYL-2M (2 meters) ZST-CABLE-PYL-5M (5 meters)
BMS	Integrated (requested external BMS SC500 o SC1000 for High Voltage protection - From 4 to 8 batteries: ZST-BMS-SC500-H From 5 to 12 batteries: ZST-BMS-SC1000-H
Range of charging operating temperature*	0°C - +50°C
Range of discharging operating temperature *	0°C - +45°C
Range of operating humidity	0....95% non-condensing
Maximum operative altitude	2000m
Operating cycles under standard conditions **	>5000
Maximum number of batteries that can be installed in parallel	In series: minimum number of modules: 4 maximum number of modules: 12
Certifications	TUV, CEI-021, CE, UN 38.3
Warranty	10 years
Communications	RS232, RS485, CAN bus

Capacity data

Single module nominal capacity	2.4 kWh
Single module useful capacity (Depth of Discharge 90%)	2.16 kWh
Total useful capacity (Depth of Discharge 90%)	From 8.64kWh (with 4 modules in series) Up to 25.92kWh (with 12 modules in series)
Nominal voltage	From 192V (with 4 modules in series) Up to 576V (with 12 modules in series)
Maximum charging current***	25A
Maximum discharging current***	25A
Maximum Depth of Discharge	90%

* to guarantee maximum performance, installation in a controlled temperature environment between 15°C and 40°C is recommended (below 15°C the batteries protect themselves by limiting the charging current)

**Standard operating conditions for batteries: ambient temperature 25°C, relative humidity 40%, depth of discharge 80%

***Actual charging and discharging currents may be limited by the operating conditions of the battery, as well as the inverters to which the batteries are connected. Please refer to the inverter data sheet for the actual charging and discharging current.

