

DATASHEET: ZCS HIGH VOLTAGE BATTERIES

ZCS AZZURRO HV SMART 5K

Technical data

Model	ZCS – AZZURRO HV SMART 5K
Code	ZZT-BAT-AHV5K
Technology	Lithium Iron Phosphate
Dimensions (H*L*W)	240mm*640mm*270mm
Weight	50 Kg
Protection class	IP65
Mounting	On ground, stackable
Cable kit for connection	Included with battery
BMS	Integrated (requested external Azzurro BDU Smart 5K for High Voltage protection - ZZT-AHV5K-BDU)
Range of charging operating temperature*	-15°C - +50°C
Range of discharging operating temperature *	-20°C - + 50°C
Range of operating humidity	0...95% non-condensing
Maximum operative altitude	2000m
Operating cycles under standard conditions **	8000
Maximum number of batteries that can be installed in parallel	8
Certifications	IEC/EN 61600-6-1, IEC 61600-6-3, IEC62619, IEC62040, CE, UN38.3 (updated list www.zcsazzurro.com)
Warranty	10 years
Communications	RS485, CAN bus

Capacity data

Single module nominal capacity	5.12 kWh
Single module useful capacity (Depth of Discharge 90%)	4.61 kWh
Total useful capacity (Depth of Discharge 90%)	From 4.61 kWh (single module) to 36.88 (8 modules in parallel)
Nominal voltage	400 V
Maximum charging current***	From 6.3A (single module) up to 50A (8 modules)
Maximum discharging current***	From 12.5A (single module) up to 50A (8 modules)
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 and below 0°C batteries stop charging to let the heating of the modules)

**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.

