

ZHERO S6 - DATASHEET

ENERGY STORAGE SYSTEM

ZHERO is an ALL-IN-ONE storage system, 100% recyclable for residential and industrial use, which is based on the use of a salt battery.

The system allows the production, accumulation and use of electricity produced from renewable sources; the system is also equipped with a backup line that can supply some users in case of a blackout.

The evolution of the energy revolution.



INPUT DATA DC

Input power range (kW)	1 - 10,8
N. Of string input	1 - 3
N° of mppt	1 - 3
MPPT Vin range (Vcc) (Depending on availability)	100 - 180 120 - 308 200 - 600
Maximum power output per MPPT (kW)	3,6
Maximum input current for MPPT (A)	40
Maximum backfeed current (A)	Max value: 1192 A peak over 0,7 ms RMS value 69 A over 12,6 s
ISC (A)	60

GENSET

Working frequencies to stay connected (Hz)	48.5 - 52.5
Genset coupling frequencies range (Hz)	49 - 51
Voltage range (V)	210 - 253



OUTPUT DATA AC

Nominal voltage (V)	230
Power output inverter (kW)	6
Pout renewable energy (kW)	6
Nominal frequency (Hz)	50
N. Of output lines "backup"	1 (backup) AC-22
Maximum "Backup" line inrush (kW)	6
Phase-Neutral short-circuit current (A)	52
Harmonic distorsion (%)	<2
Cosphi allowed	0.9 - 1
Phase-GND short circuit (A)	11
Supply	Single-phase
Net Type	TT / TN-S
Main internal components efficiency (%)	Up to 97

BATTERY DATA

Nominal voltage (V)	48
Storage capacity (kWh)	5,7 - 19,20
Depth of discharge on-grid (%)	80
Depth of discharge backup (%)	90
Battery type	Sodium nickel
Expected lifetime (years)	20
Battery warrant (years)	10



MECHANICAL SPECIFICATIONS

Dimensions (mm)	600 (l) x 600 (p) x 1360(a)
Weight (kg)	210 - 340
Ventilation	Forced
Acoustic emissions (db)	30

ENVIRONMENTAL CONDITIONS

Environment conditions	Indoor, conditioned
Temperature range (°C)	-10 / +40
Humidity (%)	5 - 85
Pollution Degree	II
Ingress protection	PDII

CONFORMITY

Marking	CE
Connection regulations	CEI 0-21: 2019-04 VDE 4106 -0124 06/2020
Certifications	EN 61000-6-2 EN 61000-6-3 EN 62109-1 EN 62109-2

MONITORING

Remote monitoring	Ethernet
Local monitoring	Usb - Installatore



SAFETY/PROTECTIVE DEVICES

Protection level	IP20
Protection class	I class by IEC 62103
AC overvoltage category	III
DC overvoltage category	II
Galvanic separation	YES
AC differential protection (mA)	300
CC SPD	Mandatory Up ≤ 2,5 kV

BACKUP ALIMENTATION DATA

Nominal voltage (V)	230
Nominal frequency (Hz)	50
Power output (kW)	0 - 6
Connection type	Screw terminals (max 10mm ²)
Supply	Single-phase