

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
Low voltage MPPT Vin range (Vcc)*	90 – 180
HIGH voltage MPPT Vin range (Vcc) **	200 – 600
Maximum power output per MPPT (kW)	3,6
Maximum input current for MPPT (A)	45

* recommended strings configuration for LOW voltage MPPT (max 180 Vcc): N.4 modules for each string with vmppt≈ 36vcc pstring ≈ 1 kWp.

** recommended strings configuration for HIGH voltage MPPT (max 600 Vcc): N.9 modules for each string with vmppt≈ 36vcc pstring ≈ 3 kWp.

GENSET

Working frequencies (Hz) to stay connected	48.5 – 52.5
Grid frequencies range (Hz)	49 – 51
Voltage range (V)	207 – 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
Spike current line "Backup" (A)	50
Connection type	Screw terminals (max 10mm ²)
Harmonic distorsion (%)	<2
Cosphi allowed	0,1 – 1
Short circuit max value (A)	32
Supply	Single-phase
Net Type	TT / TN-S
Main internal components efficiency (%)	Up to 97

BATTERY DATA

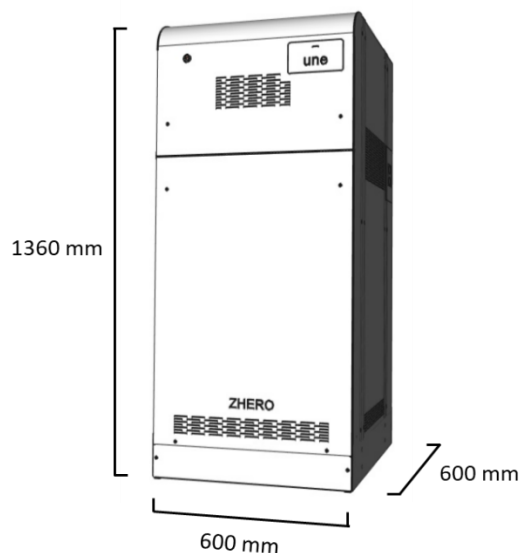
Nominal voltage (V)	48
Storage capacity (kWh)	5,7 – 19,20
Depth of discharge (%)	90
Battery type	Sodium nickel
Expected lifetime (years)	20
Battery warrant (years)	10

MECHANICAL SPECIFICATIONS

Dimensions (mm)	600 (l) x 600 (p) x 1360(a)
Weight (kg)	1 battery 240 - 2 batteries 340
Ventilation	Forced
Acoustic emissions (db)	30

ENVIRONMENTAL CONDITIONS

Temperature range (°C)	-10 / +40
Humidity (%)	95
Above sea level working (m)	< 2000



CONFORMITY

Marking	CE
Connection regulations	CEI 0-21: 2019-04 VDE 4106 -0124 06/2020
Certifications	EN 61000-6-2 EN 61000-6-3 ETSI EN 301 489-1 EN 301 489-7 EN 62109-1 EN 62109-2 EN 60950-1

SAFETY / PROTECTIVE DEVICES

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

MONITORING

Remote monitoring	Ethernet
Local monitoring	Usb - Installer



BACKUP ALIMENTATION DATA

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