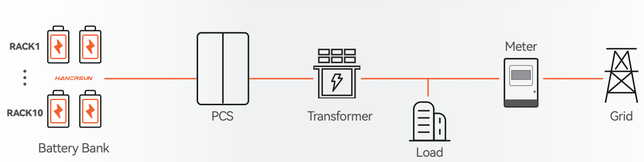
UTILITY STORAGE SYSTEM

TOPOLOGY STRUCTURE OF STORAGE SYSTEM



TECHNICAL SPECIFICATIONS

MODULE TYPE	HNESS3440/L-20H
Battery Type	Lithium iron phosphate
Cell configurations	10P384S
Rated capacity (Ah)	2800
Rated energy (MWh)	3.44
Rated voltage (v)	1228.8
Rated charge/discharge rate	0.5C
Voltage range(V)	1075.2~1382.4
Charge temperature range (℃)	-30~60
Discharge temperature range (℃)	-30~60
Storage Temperature	Short term(<1month)(℃) -30~60 Long term(<1year)(℃) 0~35
Storage humidity	≤95%
Standard Altitude (m)	2000
Cooling	Liquid Cooling
Coolant	Ethylene glycol : aqueous solution (50%v :50%v)
Fire Suppression	"NOVEC1230/FM200 Water spray"
Dimensions(L*D*H)(mm)	6058*2438*2896(20f HQ)
Total weight(T)	~35
IP Rating	IP54
Life Cycle	8000
DC Round Trip Efficiency (%)	≥93%
Detector	"Smoke & heat detector, Inflammable Gas Detector"

WEBSITE LINKEDIN

Hanersun ESS Solution Co., Ltd.

Add: 10F, B4 Block, No.19 Suyuan Avenue,
Jiangning District, Nanjing, China

Web: www.hanersun.com

E-mail: sales@hanersun.com

Tel: +86-25-5279-1766

HANERSUN

C&I ENERGY SOLUTIONS

HANERSUN

THE LEADING SOLAR STORAGE SOLUTION PROVIDER

Hanersun ESS Solution Co., Ltd is a wholly-owned member of the Hanersun group, focusing on R&D, manufacturing, and distribution across the globe.

The company specializes in energy storage solutions. Through Hanersun's strong branding and global sales network, it rapidly grew as one of the major energy storage providers in the world market.

Based on years of experience, Hanersun ESS launched the storage products, HNESS for commercial and industrial applications. The series has the features of safety, reliability, and flexibility and can be widely used in various energy storage scenarios.

APPLICATION SCENARIOS

OUR ADVANTAGES

$LiFePO_4$
Battary

≥8000
Life Cycle

5Years
Warranty

90%
DOD

INTELLIGENT ENERGY STORAGE CABINET

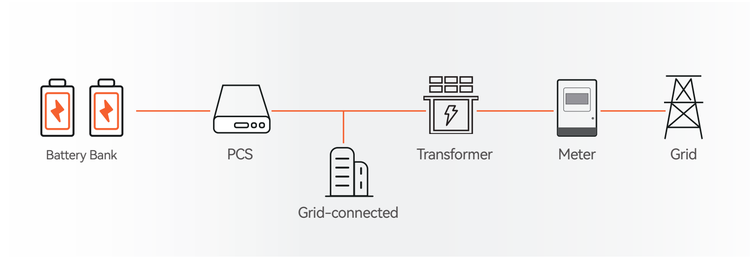
Safe and Reliable

Module desion, liquid-cooled temperature control, combustible gas detection + Heptafluoropropane fire protection to ensure system safety.

Operational Security

IP55 high degree of protection, C4 corrosion protection, battery 8000 ≥ times cycles.

TOPOLOGY STRUCTURE OF STORAGE SYSTEM



TECHNICAL SPECIFICATIONS

HNESS344-L

Technical specifications	1500V System	1000V System
Battery Type	Lithium iron phosphate	Lithium iron phosphate
Cell configurations	1P384S	2P192S
Rated capacity (Ah)	280	560
Rated energy (KWh)	344	344
Rated voltage (v)	1228.8	614.4
Rated power (kW)	172	172
Rated charge/discharge rate	0.5C	0.5C
Voltage range(V)	1075.2-1382.4	537.6-691.2
Charge temperature range (℃)	-30~60	-30~60
Discharge temperature range (℃)	-30~60	-30~60
Storage Temperature	Short term(<1month)(℃) -30~60 Long term(<1year)(℃) 0~35	Short term(<1month)(℃) -30~60 Long term(<1year)(℃) 0~35
Storage humidity	≤95%	≤95%
Standard Altitude (m)	2000	2000
Cooling	Liquid Cooling	Liquid Cooling
Coolant	Ethylene glycol : aqueous solution (50%v :50%v)	Ethylene glycol : aqueous solution (50%v :50%v)
Fire Suppression	Aerosol(Optional) / FM200 VEC1230	Aerosol(Optional) / FM200
Detector	Smoke,heat & flammable gas detectors	Smoke,heat & flammable gas detectors
Dimensions(L*D*H)(mm)	1250*1300*2340	1250*1300*2340
Total weight(T)	3.5	3.5
Anti-corrosion	C4	C4
IP Rating	IP55	IP55
Life Cycle	8000	8000
DC Round Trip Efficiency (%)	≥93.5%	≥93.5%
Compliance BMS	IEC/UL60730; UL1973:GB/T 34131-2017	IEC/UL60730; UL1973:GB/T 34131-2017
Compliance Compliance	*GB/T36276-2018	*GB/T36276-2018

HNESS215-L

DC side	
Battery Type	Lithium iron phosphate
Cell configurations	1P240S
Rated capacity (Ah)	280
Rated energy (KWh)	215
Rated voltage (v)	768
Rated power (kW)	100
Rated charge/discharge rate	0.5C
Voltage range(V)	672-864
Standard Charge/Discharge Current (A)	140/140
Cooling	Liquid Cooling
Coolant	Ethylene glycol : aqueous solution (50%v :50%v)
Life Cycle	8000
Fire Suppression	NOVEC1230/ FM200
Detector	Smoke,heat & flammable gas detectors

AC siade	
Rated AC Power (KVA)	100
AC overload Capacity (KVA)	110
Connection Mode	Three-Phase Four-Wire System
On-grid AC Voltage	380/400 (-20%~15%)Vac
On- grid Frequency	50/60(-2.5~2.5) Hz
Total Harmonic Distortion	<3%
Power Factor	-0.99~+0.99
Percentage of Voltage Regulation	≤+2%
Percentage of Current Regulation	≤+5%
Max Conversion Efficiency	98.50%
Cooling Method	Natural Convection

Battery System	
Charging Operating Temperatures Range (℃)	-30℃~60℃
Discharging Operating Temperatures Range(℃)	-30℃~60℃
Storage Temperature Range	Short term(<1month) (℃) -30℃~60℃ Long term(<1year)(℃) 0℃~35℃
Noise	<75dB
Dimensions(W*D*H)(mm)	935*1250*2340mm
Weight(T)	2.2
Anti-corrosion	C3/C4/C5
IP Rating	Battery compartment:IP65 Electrical compartment:IP54
Relative Humidity	0~ 95%, no condensing
Standard Altitude (m)	≤ 2000 (derating,> 2000)
Efficiency	≥86%
Communication Interface	CAN、Ethernet
Communication Protocol	ModbusTCP/RTU
Operation Mode Peak load shifting?	Yes
Operation Mode Demand control?	Yes
Operation Mode Economic operation mode?	Yes
Operation Mode Reactive power regulation?	Yes
Operation Mode Power grid dispatch connection?	Yes
Operation Mode Remote dispatch connection?	Yes
Operation Mode Local data storage?	Yes
Operation Mode Anti-reflux?	Optional
Compliance BMS	UL60730, GB/T34131-2017
Compliance Battery	GB/T36276-2018, EC62619, UL1973, UL9540A
Compliance PCS	GB/T34120