

Low Voltage Battery

YelonESS

LR5000



Brand new A-grade LFP cells by Tier-1 automotive cell manufacturer.



Using the self-developed BMS makes the battery more stable.



A cycle life of 6000, 10 years of service life and 20 years of design life.

16

Up to 16 batteries(81.92 kWh) can be used in one system.



Users can choose floor-mounted or rack-mounted installation.



Check the real-time status and data of the batteries on YelonESS APP.

Model		LR5000
Main Parameter		
Cell Chemistry		LiFePO ₄
Capacity [Ah]		100
Scalability		Max. 16 pcs pack (81.92kWh) in parallel
Nominal Voltage [V]		51.2
Operating Voltage [V]		46~57.6
Nominal Energy [kWh]		5.12
Charge/Discharge Current [A] ^[1]	Recommend	50
	Max.	100
	Peak [15S, 25°C]	120
Other Parameter		
Max. Depth of Discharge		95%
Dimension [WxHxD mm]		442x133x500
Weight Approximate [kg]		41
LED Indicator		5 LED(SOC: 20%~SOC100%), 2 LED (working, alarming)
IP Rating		IP21
Operating Temperature		Charge: 0~50°C , Discharge: -15°C~50°C
Storage Temperature		0~35°C
Humidity		5%~95%
Altitude		≤4000m
Cycle Life		≥6000(25°C±2°C, 0.2C/0.2C, 80%DOD, 70%EOL)
Installation		Floor-Mounted, Rack-Mounted
Communication Port		CAN, RS485
Warranty Period ^[2]		10 years
Certification		CE/UN38.3/IEC62619/RoHS/REACH/WEEE

[1] The current is affected by temperature and SOC.









[2] Conditions apply. Refer to YelonESS Warranty Letter.

Low Voltage Battery

Yelon**ESS**

LW5000



-  Brand new A-grade LFP cells by Tier-1 automotive cell manufacturer.
-  Using the self-developed BMS makes the battery more stable.
-  A cycle life of 6000, 10 years of service life and 20 years of design life.
-  IP65-rated, the battery can be installed both indoors and outdoors.
-  Internal aerosol fire-fighting module and heating module are optional.
-  Up to 16 batteries(81.92 kWh) can be used in one system.
-  Users can choose Wall-mounted or stack-up installation.
-  Check the real-time status and data of the batteries on YelonESS APP.

Model		LW5000
Main Parameter		
Cell Chemistry		LiFePO ₄
Capacity [Ah]		100
Scalability		Max. 16 pcs pack (81.92kWh) in parallel
Nominal Voltage [V]		51.2
Operating Voltage [V]		46~57.6
Nominal Energy [kWh]		5.12
Charge/Discharge Current [A] ^[1]	Recommend	50
	Max.	100
	Peak [15S, 25°C]	120
Other Parameter		
Max. Depth of Discharge		95%
Dimension [WxHxD mm]		600*430*143
Weight Approximate [kg]		45
Display		Numbers to show the SOC and codes to show the status
IP Rating		IP65
Operating Temperature		Charge: 0~50°C , Discharge: -20°C~50°C
Storage Temperature		0~35°C
Humidity		5%~95%
Altitude		≤4000m
Cycle Life		≥6000(25°C±2°C, 0.2C/0.2C, 80%DOD, 70%EOL)
Installation		Wall-mounted, Floor-mounted
Communication Port		CAN, RS485
Warranty Period ^[2]		10 years
Certification		CE/UN38.3/IEC62619/RoHS/REACH/WEEE

1] The current is affected by temperature and SOC.








[2] Conditions apply. Refer to YelonESS Warranty Letter.

High Voltage Battery

YelonESS

HS5000



-  Brand new A-grade LFP cells by Tier-1 automotive cell manufacturer.
-  Using the self-developed BMS makes the battery more stable.
-  A cycle life of 6000, 10 years of service life and 20 years of design life.
-  IP65-rated, the battery can be installed both indoors and outdoors.
-  6 Up to 6 batteries(28.8 kWh) can be used in one system.
-  The quick self-guided connectors of the modules enable fast and fool-proof installation.
-  Check the real-time status and data of the batteries on YelonESS APP.

Model		HS5000					
Main Parameter							
Cell Chemistry		LiFePO ₄					
Module Energy [kWh]		4.8					
Module Nominal Voltage [V]		96					
Module Capacity [Ah]		50					
Battery Module Qty in Series [Optional]		1	2	3	4	5	6
System Nominal Voltage [V]		96	192	288	384	480	576
System Operating Voltage [V]		84~648					
System Energy [kWh]		4.8	9.6	14.4	19.2	24	28.8
Charge/Discharge Current [A] ^[1]	Recommend	25					
	Nominal	50					
	Peak [15S, 25°C]	60					
Working Temperature [°C]		Charge: 0~50/ Discharge: -15~50					
LCD Display		5 LED(SOC20%~SOC100%); 2 LED(working, alarming)					
Communication Port		CAN/RS485					
Humidity		5%~90%					
Altitude		≤4000m					
IP Rating		IP65					
Storage Temperature [°C]		0~35					
Dimension [WxHxD mm]		620X654X400	620X864X400	620X1074X400	620X1284X400	620X1494X400	620X1704X400
Weight [kg]		92.2	148.2	204.2	260.2	316.2	372.2
Installation		Floor-mounted					
Max. Depth of Discharge		95%					
Cycle Life		≥6000(25°C±2°C, 0.2C/0.2C, 80%DOD, 70%EOL)					
Warranty ^[2]		10 years					
Certification		CE/UN38.3/IEC62619/VDE2510-50/IEC62477/RoHS/REACH/WEEE					

[1] The current is affected by temperature and SOC.








[2] The warranty is due whichever reached first of warranty period or life cycle power.

High Voltage Battery

YelonESS

HT5000



-  Brand new A-grade LFP cells by Tier-1 automotive cell manufacturer.
-  Using the self-developed BMS makes the battery more stable.
-  A cycle life of 6000, 10 years of service life and 20 years of design life.
-  IP65-rated, the battery can be installed both indoors and outdoors.
-  Up to 3 batteries(14.4 kWh) can be used in one system.
-  The quick self-guided connectors of the modules enable fast and fool-proof installation.
-  Check the real-time status and data of the batteries on YelonESS APP.

Model		HT5000		
Main Parameter				
Cell Chemistry		LiFePO ₄		
Module Energy [kWh]		4.8		
Module Nominal Voltage [V]		96		
Module Capacity [Ah]		50		
Battery Module Qty in Series [Optional]		1	2	3
System Nominal Voltage [V]		96	192	288
System Operating Voltage [V]		84~324		
System Energy [kWh]		4.8	9.6	14.4
Charge/Discharge Current [A] ^[1]	Recommend	25		
	Nominal	50		
	Peak [15S, 25°C]	60		
Working Temperature [°C]		Charge: 0~50/ Discharge: -15~50		
LCD Display		5 LED(SOC20%~SOC100%); 2 LED(working, alarming)		
Communication Port		CAN/RS485		
Humidity		5%~90%		
Altitude		≤4000m		
IP Rating		IP65		
Storage Temperature [°C]		0~35		
Dimension [WxHxD mm]		600×865±5×250	600×1295×250	600×1725×250
Weight [kg]		89.5	149.5	209.5
Installation		Floor-mounted		
Max. Depth of Discharge		95%		
Cycle Life		≥6000(25°C±2°C, 0.2C/0.2C, 80%DOD, 70%EOL)		
Warranty ^[2]		10 years		
Certification		CE/UN38.3		

[1] The current is affected by temperature and SOC.









[2] The warranty is due whichever reached first of warranty period or life cycle power.

Single Phase Hybrid Inverter

YelonESS

HV4K/4K6/5K/5K5/6K-1L



-  Support storing energy from diesel generator.
-  Supports parallel use of 6 inverters, expanding power according to actual needs.
-  AC couple to retrofit existing solar system.
-  Compatible with various battery types, such as LFP and lead-acid batteries.
-  2 MPPTs, with a maximum PV input power up to 1.5 times the inverter nominal power.
-  IP65-rated, suitable for indoor and outdoor installation.
-  Remote monitoring via APP, allowing real-time access to system operation data.
-  Seamless switching between on/off grid modes, with multiple smart working modes optional.






Model	HV4K-1L	HV4K6-1L	HV5K-1L	HV5K5-1L	HV6K-1L
PV String Input Data					
Max. PV Input Power [W]	6000	6900	7500	8300	9000
Max. PV Input Voltage [V]	550				
Start-up Voltage [V]	100				
MPPT Voltage Range [V]	80~500				
Rated PV Input Voltage [V]	720				
Max. Operating PV Input Current [A]	18.5+18.5				
Max. Input Short-Circuit Current [A]	26+26				
NO. of MPPTs/ NO. of Strings per MPPT	2/1+1				
Battery Data					
Battery Type	Lithium-ion/ Lead-acid etc.				
Battery Voltage Range [V]	40~60				
Max. Charging Current [A]	120				
Max. Discharging Current [A]	120				
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
AC Input/Output Data					
Rated AC Input/Output Active Power [W]	4000/4000	4600/4600	5000/5000	5500/5500	6000/6000
Max. AC Input/Output Apparent Power [VA]	4000/4000	4600/4600	5000/5000	5500/5500	6000/6000
Rated AC Input/Output Current [A]	17.4	20	21.8	24	26.1
Max. AC Input/Output Current [A]	19	22	23	26	28
Peak Power [VA]	6000@10 min	6900@10 min	7500@10 min	8300@10 min	9000@10 min
Power Factor Adjustment Range	0.8 leading~0.8 lagging				
Rated Input/Output Voltage/Range [V]	220/230, 0.9Un-1.1Un				
Rated Input/Output Grid Frequency/Range [Hz]	50/60				
Grid Connection Form	L+N+PE				
Total Current Harmonic Distortion (THDi)	<3%				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.6%				
European Efficiency	97.0%				
MPPT Efficiency	99.9%				
Equipment Protection					
Integrated	PV insulation resistance detection, DC reverse polarity protection , AC short-circuit protection , AC over-current protection , AC over-voltage protection , Leakage current monitoring, DC switch(solar), Anti-islanding protection, Ground Fault Monitoring				
Surge Protection Level	Type II(DC), Type III(AC)				
Interface					
Communication Interface	CAN/RS485				
Monitor Mode	Wi-Fi, GPRS(Optional), 4G(Optional)				
General Data					
Operating Temperature Range [°C]	-25~+60°C(>45°C Derating)				
Permissible Ambient Humidity	0-100%				
Permissible Altitude [m]	<4000				
Noise [dB]	<25				
IP Rating	IP65				
Inverter Topology	Transformerless				
Overvoltage Category	OVC III(AC), OVC II(DC)				
Size [WxHxD mm]	370×535×192				
Weight [kg]	20.5				
Type of Cooling	Intelligent Fan				
Safety/ EMC Standard	IEC62109-1, IEC62109-2, IEC/EN 61000-6, IEC/EN 61000-3				
Grid Regulation	EN 50549, G99, CEI 0-21, UNE 217001, UNE 217002, RD 647, IEC 62116, NTS, VFR 2019				

Three Phase Hybrid Inverter

YelonESS

HV6K/8K/10K/12K-3H



-  100% three-phase unbalanced output.
-  2 MPPTs, with a maximum PV input power up to 1.5 times the inverter nominal power.
-  IP65-rated, suitable for indoor and outdoor installation.
-  Remote monitoring via APP, allowing real-time access to system operation data.
-  Seamless switching between on/off grid modes, with multiple smart working modes optional.







Model	HV6K-3H		HV8K-3H		HV10K-3H		HV12K-3H	
PV String Input Data								
Max. PV Input Power [W]	9000		12000		15000		15000	
Max. PV Input Voltage [V]	1000							
Start-up Voltage [V]	250							
MPPT Voltage Range [V]	200~950							
Rated PV Input Voltage [V]	720							
Max. Operating PV Input Current [A]	14+14				14+28			
Max. Input Short-circuit Current [A]	17+17				17+34			
NO. of MPPTs/ NO. of Strings per MPPT	2/1+1				2/1+2			
Battery Data								
Battery Type	Lithium-ion							
Battery Voltage Range [V]	160~600							
Max. Charging Current [A]	50							
Max. Discharging Current [A]	50							
Charging Strategy for Li-ion Battery	Self-adaption to BMS							
Number of Battery Input	1							
AC Input/Output Data								
Rated AC Input/Output Active Power [W]	12000/6000		16000/8000		16000/10000		16000/12000	
Max. AC Input/Output Apparent Power [VA]	12000/6600		16000/8800		16000/11000		16000/12000	
Max. AC Input/Output Current [A]	17.3/9.5		23.1/12.7		23.1/15.9		23.1/17.3	
Peak Power [VA]	9000@60s		12000@60s		15000@60s		18000@60s	
Power Factor Adjustment Range	0.8 leading~0.8 lagging							
Rated Input/Output Voltage/Range [V]	230/400, 0.9Un-1.1Un							
Rated Input/Output Grid Frequency/Range [Hz]	50/60							
Grid Connection Form	3L+N+PE							
Total Current Harmonic Distortion (THDi)	<3%							
DC Injection Current	<0.5% In							
Efficiency								
Max. Efficiency	97.8%		97.8%		98.0%		98.0%	
European Efficiency	97.5%		97.5%		97.6%		97.6%	
MPPT Efficiency	99.9%							
Equipment Protection								
Integrated	PV insulation resistance detection, DC reverse polarity protection , AC short-circuit protection , AC over-current protection , AC over-voltage protection , Leakage current monitoring, DC switch(solar), DC over voltage protection(Battery), Anti-islanding protection, Grid monitoring							
Surge Protection Level	Type II(DC), Type III(AC)							
Interface								
Communication Interface	CAN/RS485							
Monitor Mode	Wi-Fi							
General Data								
Operating Temperature Range [°C]	-25~+60°C(>45°C Derating)							
Permissible Ambient Humidity	0-95%(no condensing)							
Permissible Altitude [m]	2000							
Noise [dB]	<40							
IP Rating	IP65							
Inverter Topology	Transformerless							
Overvoltage Category	OVC III(AC), OVC II(DC)							
Size [WxHxD mm]	504×514×199							
Weight [kg]	33							
Type of Cooling	Natural Convection							
Safety/EMC Standard	IEC62109-1, IEC62109-2, IEC/EN 61000-6							
Grid Regulation	EN 50549, VDE-AR-N 4105, PSE 2018							

All-in-one ESS

Yelon**ESS**

ComboX-3HS-6/8/10/12kW



-  100% three-phase unbalanced output.
-  Brand new A-grade LFP cells by Tier-1 automotive cell manufacturer.
-  IP65-rated, the all-in-one can be installed both indoors and outdoors.
-  Flexibly configure the all-in-one to suit users' needs. The max capacity is 12kW/24 kWh.
-  Integrated design to ensure fast and fool-proof installation.
-  Remotely monitor and control the all-in-one by YelonESS APP.

Model	ComboX-3HS-6kW	ComboX-3HS-8kW	ComboX-3HS-10kW	ComboX-3HS-12kW
PV String Input Data				
Max. PV Input Power [W]	9000	12000	15000	15000
Max. PV Input Voltage [V]	1000			
Start-up Voltage [V]	250			
MPPT Voltage Range [V]	200~950			
Rated PV Input Voltage [V]	720			
Max. Operating PV Input Current [A]	14+14		14+28	
Max. Input Short-circuit Current [A]	17+17		17+34	
NO. of MPPTs/ NO. of Strings per MPPT	2/1+1		2/1+2	
AC Input/Output Data				
Rated AC Input/Output Active Power [W]	12000/6000	16000/8000	16000/10000	16000/12000
Max. AC Input/Output Apparent Power [VA]	12000/6600	16000/8800	16000/11000	16000/12000
Max. AC Input/Output Current [A]	17.3/9.5	23.1/12.7	23.1/15.9	23.1/17.3
Peak Power [VA]	9000@60s	12000@60s	15000@60s	18000@60s
Power Factor Adjustment Range	0.8 leading~0.8 lagging			
Rated Input/Output Voltage/Range [V]	230/400, 0.9Un-1.1Un			
Rated Input/Output Grid Frequency/Range [Hz]	50/60			
Grid Connection Form	3L+N+PE			
Total Current Harmonic Distortion (THDi)	<3%			
DC Injection Current	<0.5% In			
Battery Data				
Battery type	Lithium-ion			
Scalability	2~5 pcs in series			
Nominal Voltage [V]	96			
Nominal Capacity [Wh]	4800			
Charge Temperature [°C]	0~+50			
Discharge Temperature [°C]	-15~+50			
Max. charge/discharge power [W]	6000/6000	8000/8000	10000/10000 (9360/9600@2 batteries)	12000/12000 (9360/9600@2 batteries)
Cycle Life	>6,000 (25°C ±2°C, 0.2C/ 0.2C, 80%DOD, 70%EOL)			
Equipment Protection				
Integrated	Grid monitoring, PV insulatin resistance detection, DC reverse polarity protection, AC short-circuit protection, AC over-current protection, AC over-voltage protection, Leakage current monitoring, DC switch(solar), DC overvoltage protection(Battery), Anti-islanding protection			
Surge Protection Level	Type II(DC), Type III(AC)			
Interface				
Communication Interface	CAN/RS485			
Monitor Mode	Wi-Fi			
General Data				
Operating Temperature Range [°C]	-15~+50°C(charging mode:>40°C derating, other modes:>45°C derating)			
Permissible Ambient Humidity	0-95%(no condensing)			
Permissible Altitude [m]	2000			
Noise [dB]	<40			
IP Rating	IP65			
Inverter Topology	Transformerless			
Overvoltage Category	OVC III(AC), OVC II(DC)			
Cabinet Size [WxHxD mm]	620×(979+N×210)×400			
Weight [kg]	83.8+N×56			
Type of Cooling	Natural Convection			
Safety/EMC Standard	IEC62109-1, IEC62109-2, IEC/EN 61000-6, CE/UN38.3, VDE-AR-E 2510-50			
Grid Regulation	EN 50549, VDE-AR-N 4105, PSE 2018			

Microinverter

Yelon**ESS**

MV600/800/1000-2S-W



IP67 protection rating.



2 MPPTs; maximum output power can reach 1000W.



Easy installation, plug-and-play.



Support WiFi and BLE communication.



Fast shutdown of individual panel to ensure safety.



Peak efficiency 96.3%.



PV maximum input current can reach 16A.



Built-in protection relay.



Support high-power PV panels.



Low starting voltage; wide MPPT voltage range.

Model	MV600-2S-W		MV800-2S-W	MV1000-2S-W
PV String Input Data				
Recommended PV Module Power(STC) Range [Wp]	240-405		320-540	400-670
Max. PV Input Voltage [V]			60	
Start-up Voltage [V]			22/60	
MPPT Voltage Range [V]			16~60	
Max. Input Current [A]	2x15		2x16	2x16
Max. Input Short-circuit Current [A]	2x20		2x25	2x25
No. of MPPTs/No. of Input per MPPT			2/1	
AC Output Data				
Rated AC Output Active Power [W]	600		800	1000
Peak Output Power [VA]	600		800	1000
Rated AC Output Current [A]	2.6		3.5	4.4
Max. AC Output Current [A]	3		4	5
Nominal Frequency/Range[Hz]	50/45-55, 60/55-65			
Power Factor	>0.99			
Power Factor Adjustment Range	0.9 leading~0.9 lagging			
THDi@Rated Power	<3%			
Efficiency				
European Efficiency	96.3%			
Nominal MPPT Efficiency	99.8%			
Night Power Consumption[mW]	<20			
Mechanical Data				
Dimensions(WxHxD)[mm]	244x190x42			
Weight [kg]	3.2			
Enclosure Rating	IP67			
Overvoltage category	III(AC), II(DC)			
Protective Class	Class I			
Pollution Degree (PD)	2			
Ambient Temperature Range [℃]	-40 to +65 (derating at +45)			
Type of Cooling	Natural cooling			
Max. Operation Altitude [m]	2000			
Features				
Type of AC Connection	BUS			
DC Connector	MC4 or MC4 Capacity			
Type of Isolation	HF transformers, Galvanically isolated			
AC Phase	L+N+PE			
Communication	WiFi+BLE			
Monitor	Yeloneess Cloud/App			