

# 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.



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		LiFePO4
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] <sup>[1]</sup>	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 <sup>[2]</sup>		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		LiFePO4
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] <sup>[1]</sup>	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 <sup>[2]</sup>		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

Yelon**ESS**

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		LiFePO4					
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] <sup>[1]</sup>	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 <sup>[2]</sup>		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

Yelon**ESS**

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.
- ③ 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		LiFePO4		
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] <sup>[1]</sup>	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 <sup>[2]</sup>		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 Rated output power [VA]	600	800	1000	
Peak Output Power [VA]	600	800	1000	
Nominal Output Voltage/range [V]	230 /180-265			230 /196-265
Rated Output Current [A]	2.6	3.5	4.4	
Peak Output Current [A]	3.4	4.5	5.1	
Nominal Frequency/Range[Hz]	50/45-55, 60/55-65			
Power Factor	>0.99			
Adjustable power factor	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]	3.5			
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	YeloneSS Cloud/App			