

DYN^{ESS}



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DYN^{ESS}



Energy Storage
System Solutions

North America

Discover Your Nature

About Dyness

Dyness, founded in 2017, is a global pioneering energy storage solutions innovator. Relying on advantageous technology and robust product R&D capabilities, Dyness has established a comprehensive product portfolio for full scenarios, including C&I and residential energy storage throughout the entire lifecycle. With its global headquarters in Suzhou, China, Dyness has provided safe, reliable, and high-quality products and services to 500,000+ users in 100+ countries and regions.

At Dyness, customer satisfaction is always Dyness' top priority. Aligned with its mission to reduce the Earth's temperature, Dyness is collaborating with 90+ global brand partners to reduce the cost of renewable energy usage for users. As the pace of global energy transition accelerates, Dyness is committed to promoting sustainable development on a global scale through commercial deepening. It strives to work alongside the industry, market and society to build a low-carbon future worldwide.

• Mission

Driving digital energy development, reducing the cost of energy acquisition, and lowering Earth's temperature.

• Vision

Achieving customer priority, enabling the advancement of global sustainable pursuits, and striving to become a better version of oneself.

• Values

Be True Be Pragmatic Be Excellent Be Altruistic



Global Footprint

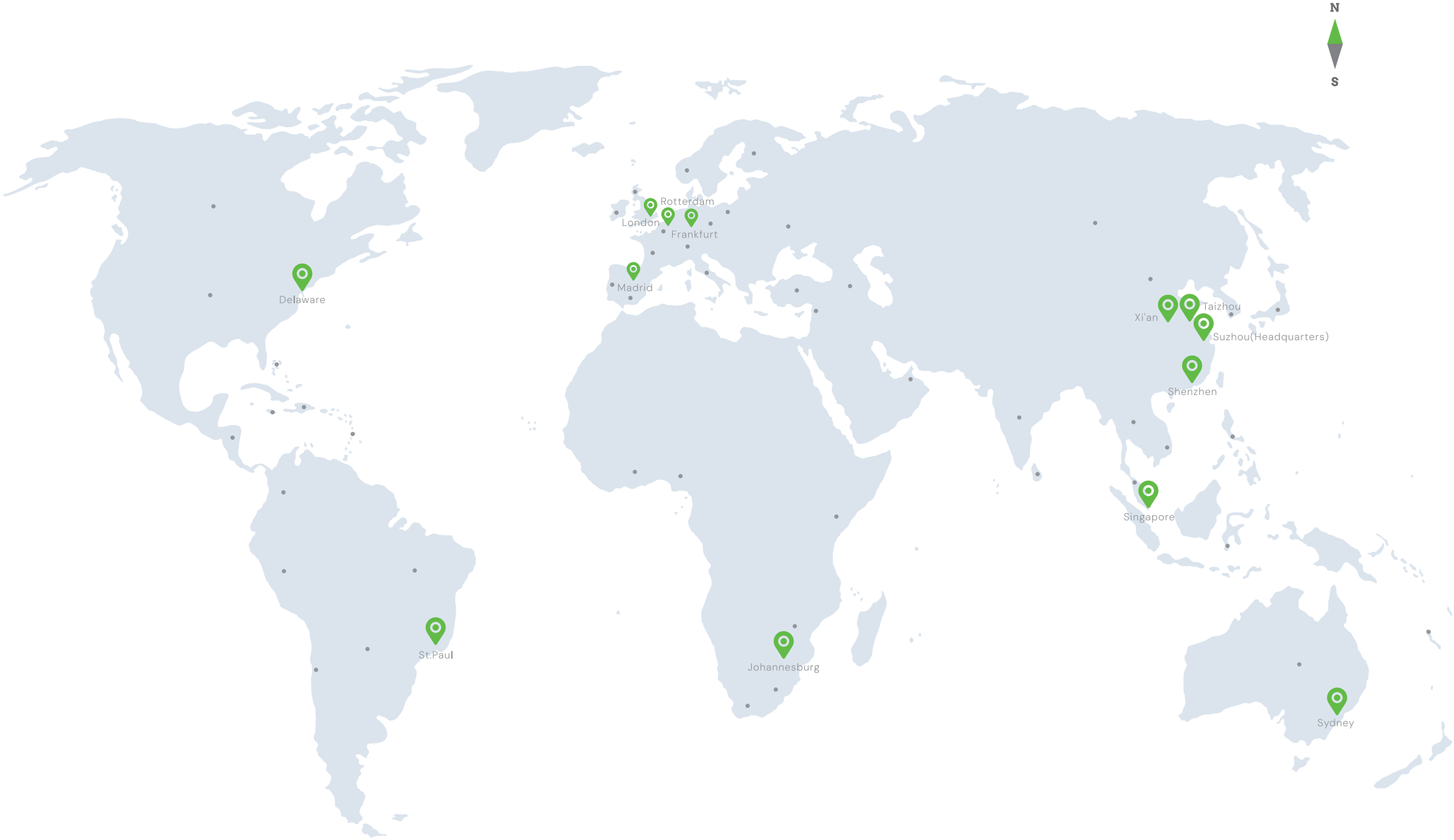
The Global Pioneering Energy Storage Solutions Innovator

- EUPD Top Brand PV (Storage)
- China TOP 500 Hidden Unicorn
- iF Design Award 2024 Winner

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● Main Shipping Areas

📍 Branches



13

Global Branches

2

Production Centres

2

R&D Centres

3 GWh

Annual Production Capacity

100+

Global Markets

500,000+

Users

Residential Energy Storage Products



Ultra Safe



Flexible Expansion



Easy Installation



Smart Management



Perfect Compatibility



Powerbox-US

Powerbox-US is a low-voltage energy storage product specifically designed for the U.S. residential market. It supports up to 25 units in parallel and provides an energy capacity range from 10.24 kWh to 256 kWh. Additionally, it boasts a high protection class of type grade 4X.



Features and Advantages

Flexible Expansion

Up to 25 units in parallel,
10.24kWh--256kWh capacity

Type Grade 4X

Fearless of outdoor insatallition, strong
environmental adaptability

Easy Installation

0 wiring, plug&play, support wall-mounted,
floor-mounted installations

Smart Management

Real-time system monitoring, remote
control, OTA updates

Specification

Model	Powerbox-US
Battery Type	LiFePO ₄
Nominal Battery Energy	10.24kWh
Nominal Capacity	200Ah
Nominal Voltage	51.2V
Working Voltage	44.8~57.6V
Recommend Output Power	5.12kW
Max Output Power	7.68KW
Recommended Charge/Discharge Current	100A
Recommended Depth of Discharge	90%
Weight	223lbs
Dimension [W/H/D, inch]	21.85/36.54/8.27
Charging Temp. Range	32°F~131°F
Discharging Temp. Range	-4°F~131°F
Communication	CAN/RS485/RS232
Warranty	10 Years
Warranty Document Supplied	Yes
WIFI Module	Optional
Cycle Life *	≥6000 Cycles
Type Grade	4X
Expansion	Up to 25 units in parallel
Compatible Inverters	SMA/Schneider/Victron energy/Ingeteam/Solis /GoodWe/Growatt/Soplanet/Luxpower/DEYE etc.
Certification & Safety Standard	UN38.3/UL1973/UL9540/UL9540A/CEC

* Test conditions: 0.2C Charging& Discharging. @25°C, 90% DOD

Powerbox G2

Powerbox G2 is a low-voltage product designed for residential energy storage scenarios, supporting up to 50 parallel units, 10.24kWh--512kWh energy coverage. With 6.5in slim design, there is no limit to the installation space. 1C Discharge, providing strong power for household electricity consumption.



Features and Advantages

Flexible Expansion

Up to 50 units in parallel,
10.24kWh--512kWh capacity

Automatic Self-heating

-20°C to 55°C operating temperature
(optional)

Easy Installation

30% less volume, 15% less weight
save time and labor

Ultra Safe

Intelligent fire extinguishing system,
detects and extinguishes fires in 5s,
automaticly pressure relief

1C Discharge

Max discharge current:200A, simultaneously
supplying power to multiple loads

IP66 Protection

Fearless of outdoor insatallition,
strong environmental adaptability

Specification

Model	Powerbox G2
Battery Type	LiFePO ₄
Nominal Battery Energy	10.24kWh
Usable Energy	9.728kWh
Operating Voltage	44.8-57.6V
Nominal Voltage	51.2V
Nominal Capacity	200Ah
Nominal Charge or Discharge Power	5.12kW
Max Discharge Power	10.24kW
Recomended Charge & Discharge C Rate	0.5C
Max Discharge C Rate	1C
Recommended Charge/Discharge Current	100A
Max Discharge Current	200A
Peak Discharge Current	300A (2mins, 25°C)
Recommended Depth of Discharge (DOD)	95%
Net Weight	99.7kg
Dimension[W/D/H]	710/165/640mm
Charging Temp. Range	0~55°C/-20~55°C (with heating function)
Discharging Temp. Range	-20~55°C
Communication	CAN/RS485
Cycle Life *	≥8000 Cycles/10 Years
Protection Level	IP66
Expansion	Up to 50 units in parallel
Color	White
WIFI Module	Built-in WiFi module; APP OTA function
Battery low temperature heating function	Optional
Active fire protection system	Built-in aerosol fire extinguisher
Certification & Safety Standard	UN38.3/CE-EMC/IEC62619/IEC62040/CE-RED/CEC
Compatible Inverters	SMA/Schneider/Victron energy/Ingeteam/ Solis/GoodWe/Growatt/Solplanet/SOFAR/SAJ/DEYE/Apsystem etc.

* Test conditions: 0.2C Charging & Discharging. @25°C, 95% DOD

Tower-US

Tower-US is a high-voltage energy storage product specially designed for the US residential market, featuring a sleek and modern appearance. It supports a maximum of 12 clusters in parallel and provides an energy capacity range from 7.1 kWh to 170.52 kWh. Type grade 4X ensures that families can use electricity with confidence.



Features and Advantages

- Flexible Expansion**
Up to 12 clusters in parallel,
7.1kWh--170.52kWh capacity
- Easy Installation**
0 wiring, plug&play, allow one people to install
- Type Grade 4X**
Fearless of outdoor insatallition, strong
environmental adaptability
- Smart BMS**
Millisecond level status monitor, real time
battery management and optimization

Specification

Model	Tower T7-US	Tower T10-US	Tower T14-US
Module Number	2	3	4
Nominal Capacity	37Ah		
Nominal Battery Energy	7.10kWh	10.66kWh	14.21kWh
Nominal Voltage	192V	288V	384V
Maximum Continuous Discharge Power*	5.76kW	8.64kW	11.52kW
Maximum Continuous Charge Power*	5.76kW	8.64kW	11.52kW
Dimension [W/D/H, inch]	19.8/14.9/27.6	19.8/14.9/35.4	19.8/14.9/43.3
Weight	231lb	322lb	412lb
Max Depth of Discharge	100%		
Charging Temp. Range	32 F-122°F		
Discharging Temp. Range	14 F-122°F		
Communication	CAN/RS485		
Warranty	10 Years		
Warranty Document Supplied	Yes		
Cycle Life**	≥6000 Cycles		
Type Grade	4X		
Color	White		
Alarms	Overcharge/Overdischarge/Overcurrent/Overtemperature/ShortCircuit		
Pros	Can be used in both off-grid and hybrid setups compactdesign modular expansion		
Battery Module Type	HV9637		
Module Connection Method	in series		
Compatible Inverters	Solis		
Certification	UN38.3/UL1973/UL9540A/UL9540/AVL		

* Maximum Continuous Discharge/Charge Power when communicating with inverter is 0.6C

** Test conditions:0.2C Charging&Discharging.@25℃,95%DOD

E-Pearl 1000W

The E-Pearl 1000W is a portable outdoor power supply that provides power for your journey. It has multiple output ports that can power multiple devices such as mobile phones, computers, drones, etc. Meanwhile, it supports multiple charging methods, so you don't have to worry about power problems when you're on the go. Small size, light weight, space-saving, so your outdoor life without power worries.



Features and Advantages

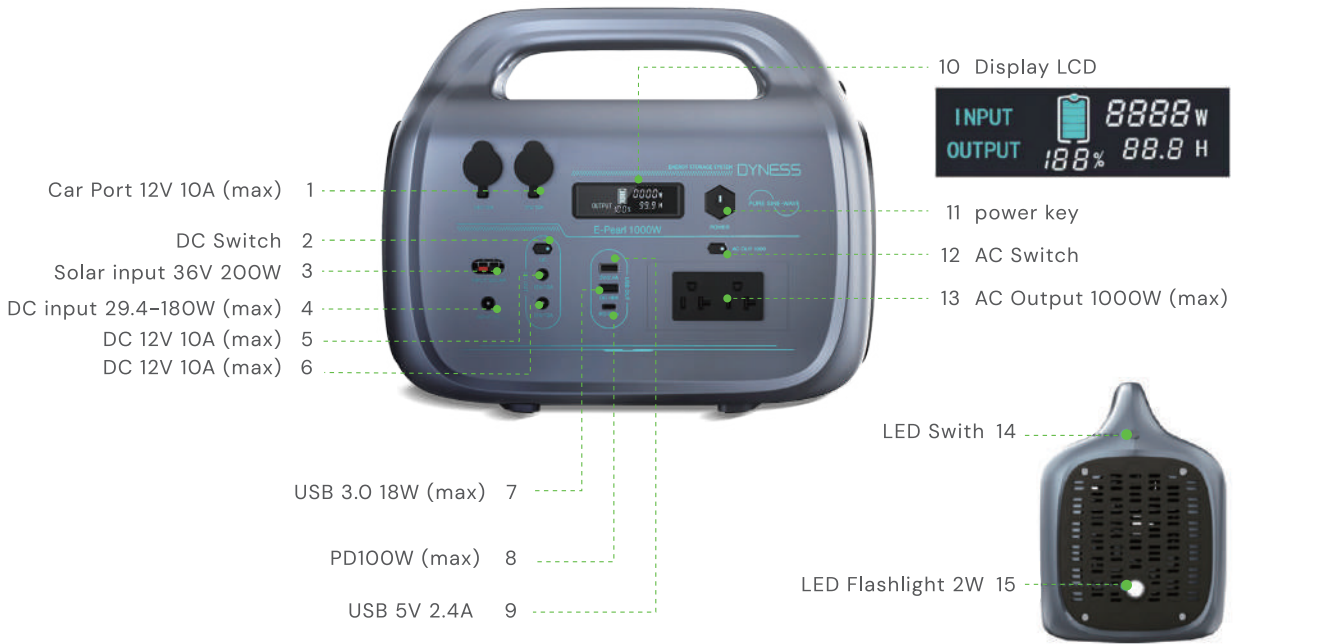
- Large Power in Small Size**
With a capacity of 1075Wh and 1000W output, power for outdoor life
- Multi-output Interfaces**
Includes AC output, USB-A, USB-C and other output interfaces, allowing multiple devices to be charged simultaneously
- Ultra Safe**
LFP battery cells, multi-safety protection, 2000 charge and discharge cycles
- Lightweight and Portable**
Weight 27.28lbs, 14.96*8.43*12.17 inches, easy to carry with one hand.
- 3 Ways to Charge**
Support AC input, solar input and car charging, charge anywhere

Specification

Model	E-Pearl 1000W
Nominal Capacity	1075Wh
Cell Material	LiFePO ₄
Size	L356 W216 H300mm
Weight	27.28lbs
Certification	FCC/CE/PSE/UN38.3/MSDS/CEC/AVL
Cycle Life	2000
Working Temp.	0-40°C
Storage Temp.	-10-65°C
Max AC Output	1500W

Phone (12Wh) ≈87 recharges	Pad (30Wh) ≈34.5 recharges	TV (100Wh) ≈10 hours
Laptop (50Wh) ≈20.5 recharges	LED Light (5Wh) ≈53.5 hours	Mini Fridge (60Wh) ≈17 hours

Panel Function Description



Orion

Orion system is designed for North American households, providing energy coverage ranging from 9.9 kWh to 19.9 kWh. Its modular design allows for a flexible battery layout. Equipped with an external HM inverter and SCD box, it supports both partial and whole-house backup, and it comes with a 12-year warranty, safeguard your home's electricity without worry.



Features and Advantages

- Expandable On Demand**

Modular Design,
9.9kWh--19.9kWh capacity
- Backup Solution**

Support both partial or whole-house backup
- Easier Space Layout**

Battery could be laid out freely,
high space utilization
- Long-term Reliability**

LFP cells, ≥10000 cycles, 12 years warranty
- Ultra Safe**

Built-in AFCI to support DC Arc draw
detection and eliminate fire hazards,
UL9540, UL9540A approved

Specification

Model	ORION9.9	ORION14.9	ORION19.9
Module Type	LiFePO ₄	LiFePO ₄	LiFePO ₄
Module Number	2	3	4
System Nominal Capacity	52Ah	52Ah	52Ah
System Nominal Battery Energy	9.98kWh	14.98kWh	19.97kWh
System Max. Discharge Power	7.68kW	11.52kW	15.36kW
System Nominal Voltage	192V	288V	384V
System Size	Different combinations, different sizes		
System Voltage Range	168~219V	252~328.8V	336~438V
Battery System Charge Voltage	219V	328.8V	438V
Max Battery System Charge/Discharge Current	40A	40A	40A
Battery System Discharge lower-Voltage	168V	252V	336V
System Configuration	2 Series	3 Series	4 Series
Battery System Max. Charge& Discharge Current	40A	40A	40A
System Recommend Depth of Discharge	90%		
System Max Depth of Discharge	90%		
System Discharge Temp. Range	14°F~122°F		
System Charge Temp. Range	32°F~122°F		
Short Circuit Current	1.5kA		
Warranty	12 Years		
Cycle Life[1]	≥10000 Cycles		
Enclosure Protection	NEMA 4X		
Battery Module Name	HV9652		
Battery Module Energy	4.99KWh		
Battery Module Voltage	96V		
Battery Module Capacity	52Ah		
Battery Module Weight	127.9lbs(58kg)		
Battery Module Dimension [W/H/D, inch]	21.3/24.3/6.5 in(540/616/165mm)		
System Certification	UN38.3/UL1973/UL9540A/UL9540/CEC(US)/AVL		

Model	Orion BDU
Operating Voltage	80~750V
Maximum Continuous Current	52A
Dimension [W/D/H, inch]	21.3/12.4/6.5 in (540/316/165mm)
Weight	39.7lbs (18kg)
Enclosure Protection	NEMA 4X

Model	TX5K-HM	TX6K-HM	TX7.6K-HM	TX9.6K-HM	TX11.4K-HM
Battery Input Data					
Battery Type	Orion Battery				
Battery Voltage Range(V)	80~490				
Max.Charge/Discharge Current(A)	40/40				
Max.Charge/Discharge Power(W)	5500	6600	8360	11000	12540

Model	TX5K-HM	TX6K-HM	TX7.6K-HM	TX9.6K-HM	TX11.4K-HM
PV String Input Data					
Max.PV Input Power (W)	7500	9000	11400	15000	17100
Max.PV Input Voltage (V)	600				
MPPT Range (V)	60~550				
SPS Start-up Voltage (V)	60				
MPPT Range For Nominal Power (V)	180~500	210~500	185~500	170~500	200~500
Nominal PV Input Voltage (V)	390				
Max.Input Currrent (A)	15				
Max.Short Currrent (A)	20				
No.of MPP Trackers	2	2	3	4	4
Strings per MPP Tracker	1				
AC Output Data (On-grid)					
Nominal Power Output To Grid (VA)	5000	6000	7600	9600	11400
Max.Power Outpur To Grid (VA)	5000	6000	7600	9600	11400
Max.Power From Grid (VA)	5000	6000	7600	9600	11400
Nominal Output Voltage (V)	120/240				
Nominal Output Frequency (Hz)	60				
Max.AC Current To Grid (A)	20.8	25	31.7	40	47.5
Max.AC Current From Grid (A)	20.8	25	31.7	40	47.5
Output Power Factor	Adjustable from 0.8 leading to 0.8 lagging				
Output THDi (Nominal Power)	< 3%				
AC Output Data (Back-up)					
Max.Output Power (VA)	5000	6000	7600	10000	11400
Peak Output Power (VA)	9120,60sec	9120,60sec	9120,60sec	13680,60sec	13680,60sec
Max.Output Current (A)	20.8	25	31.7	40	47.5
Nominal Output Voltage (Vac)	120/240(without transomer)				
Nominal Output Frequency (Hz)	60				
Output THDv (@Linear Load)	< 3%				
Whole Home Back-up	Yes, With SCD				
Efficiency					
MPPT efficiency	99.90%	99.90%	99.90%	99.9%	99.90%
Max.efficiency	97.50%	97.50%	97.60%	97.7%	97.70%
CEC-efficiency	97.00%	97.00%	97.00%	97.0%	97.00%
Protection					
Anti-island Protection	Integrated				
PV&Battery AFCI	Integrated				
Rapid Shut Down	Integrated				
PV Reverse Protection	Integrated				
Battery Reverse Protection	Integrated				
Residual Current Monitoring Unit	Integrated				
Over Current/ Voltage Protection	Integrated				
DC Switch (PV)	Integrated				
Surge Protection	DC Typell/AC Typelll				
Communication Interface					
Battery BMS	CAN				
EMS	RS485				
Meter	RS485				
Dry Contact	YES(DO)				
Cloud	Wi-Fi, Bluetooth, LAN				
Display/User Interface	LED/APP				

Model	TX5K-HM	TX6K-HM	TX7.6K-HM	TX9.6K-HM	TX11.4K-HM
Certifications&Standards					
Grid Regulation	UL1741 SA,California rule 21,HECO Rule 14,IEEE1547,IEEE1547.1				
Safety Regulation	UL1741,CSA 22.2No.107-01, UL 1998,UL1699B				
EMC	FCC Part15 CLASS B				
General Data					
Operating Temperature Range (°F)	-13-140(-25-60°C)				
Relative Humidity (%)	0-100%				
Operating Altitude (ft)	≤9843ft(3000m)				
Cooling	Natural Cooling				
Noise (dB)	<35				
Weight (b)	66l				
Size (W/H/D) (inch)	19/28.5/8				
Installation	Wall-Mounted				
Enclosure Type	NEMA 4X(IP66)				

Model	SCD-200-63
Electrical Data	
Nominal Output Voltage (V)	240
Output Voltage Range (V)	211~264
Feed-in Type	Split Phase
Nominal AC Voltage of Line Conductor (V)	120/240
Nominal AC Frequency (Hz)	60
AC Frequency Range (Hz)	58.5~61.2
Current Rating (From Grid) (A)	200
Max.Continuous Current FromInverter (A)	47.5
Maximum Overcurrent Protection of Main Breaker (A)	200
Maximum Overcurrent Protection of Circuit Breaker ofInverter (A)	63
General Data	
Operating Temperature Range (°F)	-13°F~+140°F(-25°C~+60°C)
Max.Operating Altitude (ft)	9842ft (3000m)
Cooling Method	Natural Cooling
Communication with Inverter	RS485
Weight (lb)	35.3lbs (16kg)
Dimension (W/H/D in)	22.2/25.5/6.0(564/648/153mm)
Mounting Method	Wall Mounted
Ingress Protection Rating	Type 3R(IP44)
Certification	
Safety Regulation	UL1741,CSA 22.2 No.107-O1
EMC	FCC part15 CLASS B

Cygni

Dyness Cygni Series is a brand-new all-in-one residential energy system. This product offers 8kW and 10 kW capacity options, providing an energy coverage range of 7.68 kWh to 15.36 kWh, which ensures energy independence and maximizes savings on utility bills. Its wiring-free stack design simplifies installation, making it more convenient than ever.



Features and Advantages

- Safe & Reliable**
Build in active fireprotection system, strong cell balance ability
- 1C Ultra-rapid Charge**
Fully charge the battery in just one hour
- Easy Installation**
Wiring-free stack design, one-click commissioning system self-check
- IP66 Protection**
Fearless of outdoor insatallation, strong environmental adaptability
- VPP Ready**
Quick demand response

Specification

System Type	Cygni Hybrid		Cygni AC	
Inverter Model	Cygni 8.0HS-M2/3/4	Cygni 10.0HS-M2/3/4	Cygni 8.0AS-M2/3/4	Cygni 10.0AS-M2/3/4
Battery Input Data				
Battery Type	LiFePO ₄			
Battery Module	Cygni BAT-3.8			
Expandable Quantity	2~4			
Usable Energy (kWh)	7.68~15.36			
Operating Voltage (V)	168~438			
Nominal Voltage (V)	192~384			
Max.Charge/Discharge Power (kW)	7.68~11			
Max. DOD (Depth of Discharge)	95%			
Cycle Life	≥8000 Cycles			
PV String Input Data				
Max. PV Input Power (W)	12000	15000	-	
Max. PV Input Voltage (V)	600		-	
MPPT Range (V)	60~550		-	
Start-up Voltage(V)	60		-	
Nominal PV Input Voltage (V)	390		-	
Max. Input Currrent / Max. Short Currrent (A)	16 / 23		-	
No. of MPP Trackers / Strings per MPP Tracker	3/1		-	
AC Output Data (On-grid)				
Nominal Power Output To Grid (VA)	8000	9999	8000	9999
Max Power Outpur To Grid (VA)	8000	9999	8000	9999
Max Power From Grid (VA)	8000	9999	8000	9999
Nominal Output Voltage (V)	230			
Nominal Output Frequency (Hz)	50			
Output Power Factor	Adjustable from 0.8 leading to 0.8 lagging			
Output THDi (Nominal Power)	< 3%			
AC Output Data (Back-up)				
Nominal Output Power (VA)	8000	10000	8000	10000
Max. Output Power (VA)	9600	12000	9600	12000
Nominal Output Voltage (Vac)	230			
Nominal Output Frequency (Hz)	50			

System Type	Cygni Hybrid	Cygni AC
Output THDv (@Linear Load)	< 3%	
Backup UPS (ms)	< 10	
Inverter Efficiency		
Max. Efficiency	97.5%	
European Efficiency	97.0%	
Protection		
Anti-island Protection	Integrated	
PV String Input Reverse Polarity Protection	Integrated	
Battery Reverse Protection	Integrated	
Residual Current Monitoring Unit	Integrated	
Over Current/Voltage Protection	Integrated	
AC Short Circuit Current Protection	Integrated	
DC Switch (PV II)	Integrated	
Fire Protection System	Built-in aerosol fire extinguisher (optional)	
Surge Protection	DC Type II/AC Type III	
General Data		
Topology	Non-Isolated	
Operating Temperature Range (°C)	0~50	
Relative Humidity (%)	0~95	
Operating Altitude (m)	3000	
Cooling	Natural Convection	
Noise (dB)	<35	
Inverter / Battery Module Weight (kg)	27.5 / 40.5	
System Weight (kg)	113.2/153.7/193.7 (Depending on the module number)	
Inverter / Battery Module Size (W/H/D)	650*450*180mm / 650*300*180mm	
System Size (W/H/D)	650*1130*180or650*1430*180or650*1730*180mm(Depending on the module number)	
Installation Methods	Wall-Mounted & Floor-standing	
Communication	RS485, Wi-Fi, Bluetooth	
Display	LCD Screen; APP; Web	
Enclosure Type	IP66	
Certifications & Standards	UN38.3, AS/NZS 4777.2: 2020, IEC 62109-1/2, IEC62040,EN 62920:2017/ A1:2021,IEC/EN 61000-6-1/3	
Country of Manufacture	China	



Commercial and Industrial Energy Storage Products

 Optimal Investment

 Safe & Reliable

 High Energy Density

 All Scenario

 Intelligent O&M



STACK100

STACK100 is specifically designed for residential, small commercial, and industrial storage applications. This system features a rackless, free-stacking design that allows for easy plug-and-play installation. It supports up to 12 clusters of parallel machines, with a maximum expansion capacity of 921 kWh. With 1C charging and discharging capabilities and a 10-year warranty.



Features and Advantages

Flexible Expansion

Up to 12 clusters in parallel,
15KWh--921KWh capacity

1C Rate

Suitable for grid frequency regulation, charging stations and other scenarios, cost saving

Automatic Self-heating

-20°C to 55°C operating temperature
(optional)

Ultra Safe

Intelligent fire extinguishing system,
react within 5 seconds

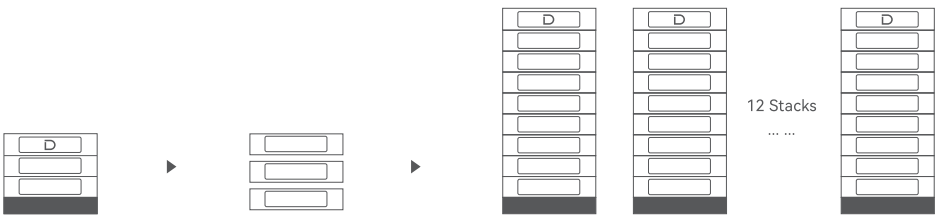
Easy Installation

0 wiring, rackless free stacking, plug-and-play,
one cluster installation in 30min

Module Mixing

Free mixing of modules within three years

Specification



Model	STACK100
Battery Type	LiFePO ₄
Module Voltage/Capacity	51.2V/100Ah
Single Module Weight	47Kg
System Modules Serial Number	3~15
System Energy Range	15.36~76.8kWh
Operating Voltage	134~864V
Recommended Charge/Discharge Current	50A (0.5C)
Max.Charge/Discharge Current	100A (1C)
Peak Discharge Current(2min 25°C)	125A(1.25C)
Depth of Discharge	95%
Communication	CAN/RS485
Cycle Life	≥8000 Cycles / 10 Years
Single Cluster Dimension[W*D*H](mm)	590*390*(233+133*n), "n" stands for the number of battery modules
Charging Temp. Range	0~55°C/-20~55°C(Optional)
Discharging Temp. Range	-20~55°C
Protection Level	IP20
Fire Protection System	Aerosol fire extinguisher
Installation method	Stack type
Cooling method	Forced wind cooling
WiFi Module	Built-in WiFi module; APP OTA function
Certification & Safety Standard	CE-EMC/CE-RED/62619/63056/62477/62040/UN38.3
Compatible Inverters	Ingeteam/Solis/GoodWe/Growatt/Solplanet/SAJ/DEYE/Hoymiles/SOLINTEG ect.

* Test conditions: 0.2C Charging& Discharging ,@25 C , 95% DOD

DH200Y

DH200Y is the first high-security, high-energy density, DC1000V liquid-cooled all-in-one energy storage system designed for grid-connected projects, including office parks, commercial buildings, and charging stations. Single cabinet capacity of 232kWh, maximum support for 10 machines in parallel, expandable to 2.3MWh. With a 9% increase in energy density and a 10% reduction in floor space. The higher energy density provides superior options for energy storage solutions.



Features and Advantages

- Flexible Expansion**

Maximum support for 10 machines in AC parallel, expandable to 2.3MWh; reserved DC expansion interface.
- Ultra Safe**

Intelligent fire extinguishing system, react within 5 seconds
- Ultra-high Level Protection**

PACK+PCS IP65,C3/C5 Anti-corrosion grade optional, handles harsh environments such as high humidity and salt spray corrosion with ease.
- Economical**

Occupies an area of 1.58m², energy density up to 147kWh/m², low installation costs
- Smart Temperature Control**

PACK smart liquid cooling+PCS smart Air cooling,cluster-level temperature difference≤ 3°C
- Minimal O&M**

Modular design, pre-maintenance solution for easy access and O&M, and support for online monitoring and O&M

Specification

Model	DH200Y
Battery	
Battery Type	LiFePO4
Battery Capacity	280Ah
PACK Configuration	1P52S*5
Rated Current	140A
Max. Current	160A
Voltage Range	754~936Vdc
Nominal Capacity	232kWh
On-grid AC Side	
Rated Power	100kW
AC Maximum Current	145A
AC Rated Voltage	400Vac
Wiring Method	3P4L+PE
Frequency	50Hz
Power Factor	1(Leading)~1(Lagging)
THDi	≤3% (Rated power)
Max. Number Of Parallel Expansions	10
System	
Weight	2600±100kg
Dimension (W/D/H)	1055/1475/2400mm
Max. Efficiency	90%
Liquid-cooling Power	2.5kW (Cooling), 2kW (Heating)
Operating Temperature	-20~50°C (Derating above 45°C)
Operating Humidity	0~95%RH (Non-condensing)
Ingress Protection	IP55
Anti-corrosion Grade	C3(Optional C5)
Cooling Method	PACK Liquid-cooling + PCS Air-cooling
Noise	≤75dB
Elevation	3000m (Derating above 2000m)
Display	Touch screen
Fire Protection	Aerosol, Multi-sensor/Water ingress, Explosion-proof ventilation
Communication	Ethernet/4G/RS485
Certification	CQC, CE, TUV, LVD, UN38.3

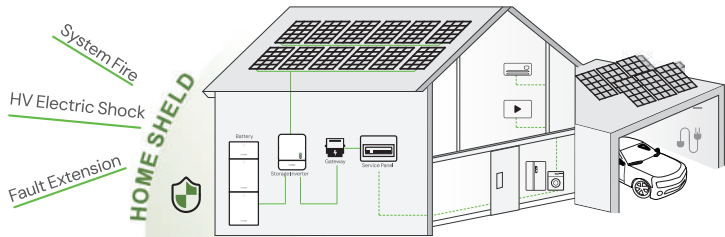
Orion Destiny



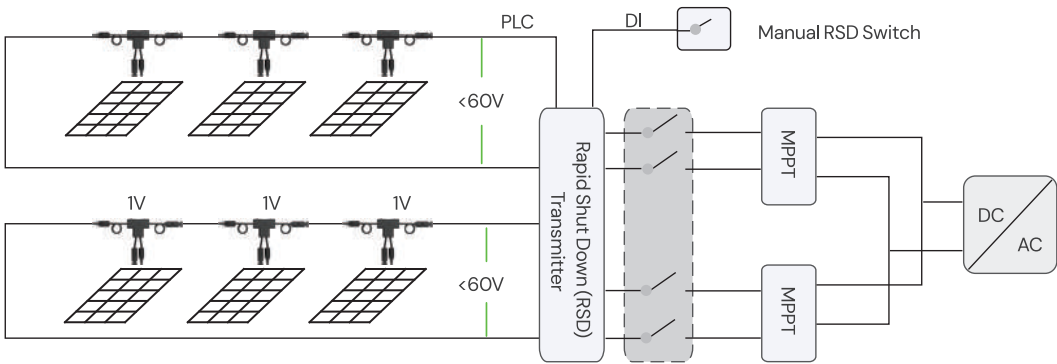
Safety

Rapid Shutdown and AFCI Safety

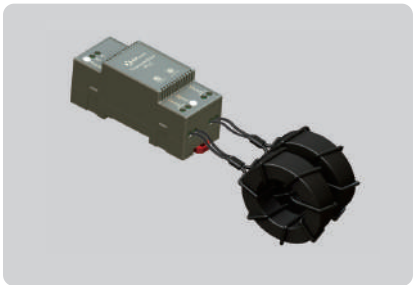
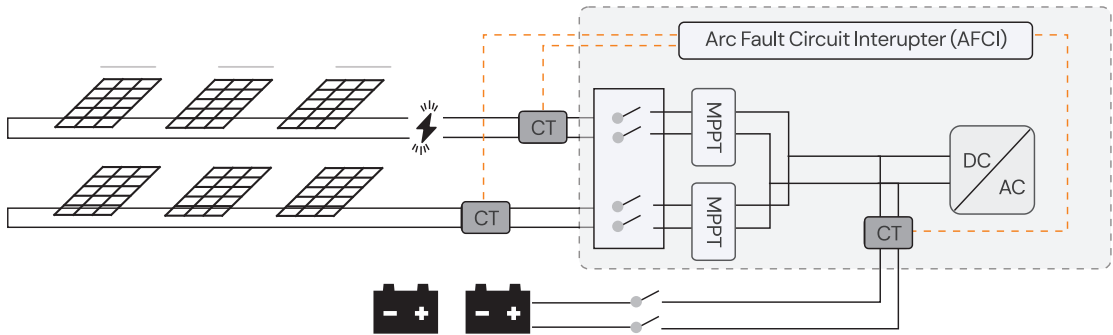
DYNESS system integrates necessary safety measurements for your house. With integrated RSD transmitter (APSmart RSD-PLC), solar strings will drop to a touch-safe voltage upon inverter shutdown, thus, to minimize electric shock risk.



Rapid Shutdown System Topology Scheme

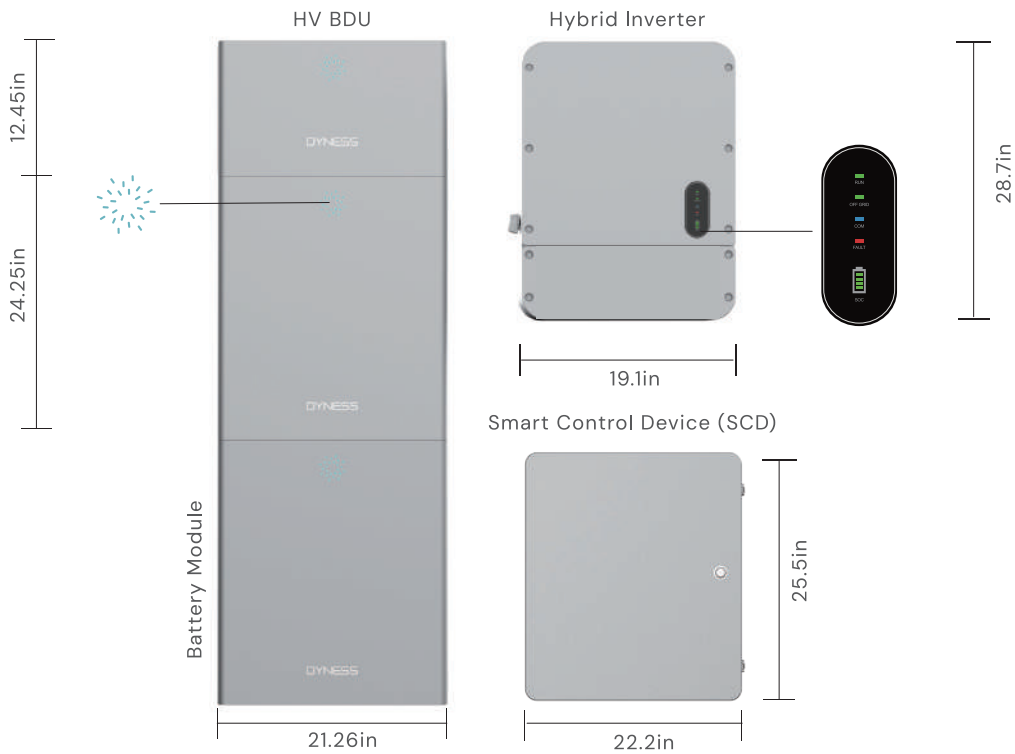


AFCI System Topology Scheme



The AFCI system will have an overall measurement of electric ARC fault on DC side, both SOLAR and BATTERY. The system will restart to check again in case of false alarm for the first 4 faults detected. If fault continues, system will shut down from the 5th AFCI alarm.

Elegant Indicator Light



HYBRID INVERTER		
LED INDICATOR	LED STATUS	DEFINITION
RUN		ON=Inverter is running Single Flash=Inverter is power on Double Flash=Inverter is starting OFF=Inverter is not operating
OFF GRID		ON=Back-up is ready Single Flash=Grid bypass mode OFF=Back-up port no voltage
COM		ON=BMS and meter communication ok Single Flash=Meter com.ok, BMS communication fail Double Flash=BMS com.ok, Meter communication fail OFF=BMS and Meter communication fail
FAULT		ON=Error Occured OFF=No Errors
SOC		4th LED Blinks= $0\% \leq SOC \leq 25\%$ 3rd LED Blinks= $25\% < SOC \leq 50\%$ 2rd LED Blinks= $50\% < SOC \leq 75\%$ 1rd LED Blinks= $75\% < SOC \leq 100\%$

BDU LED INDICATORS:

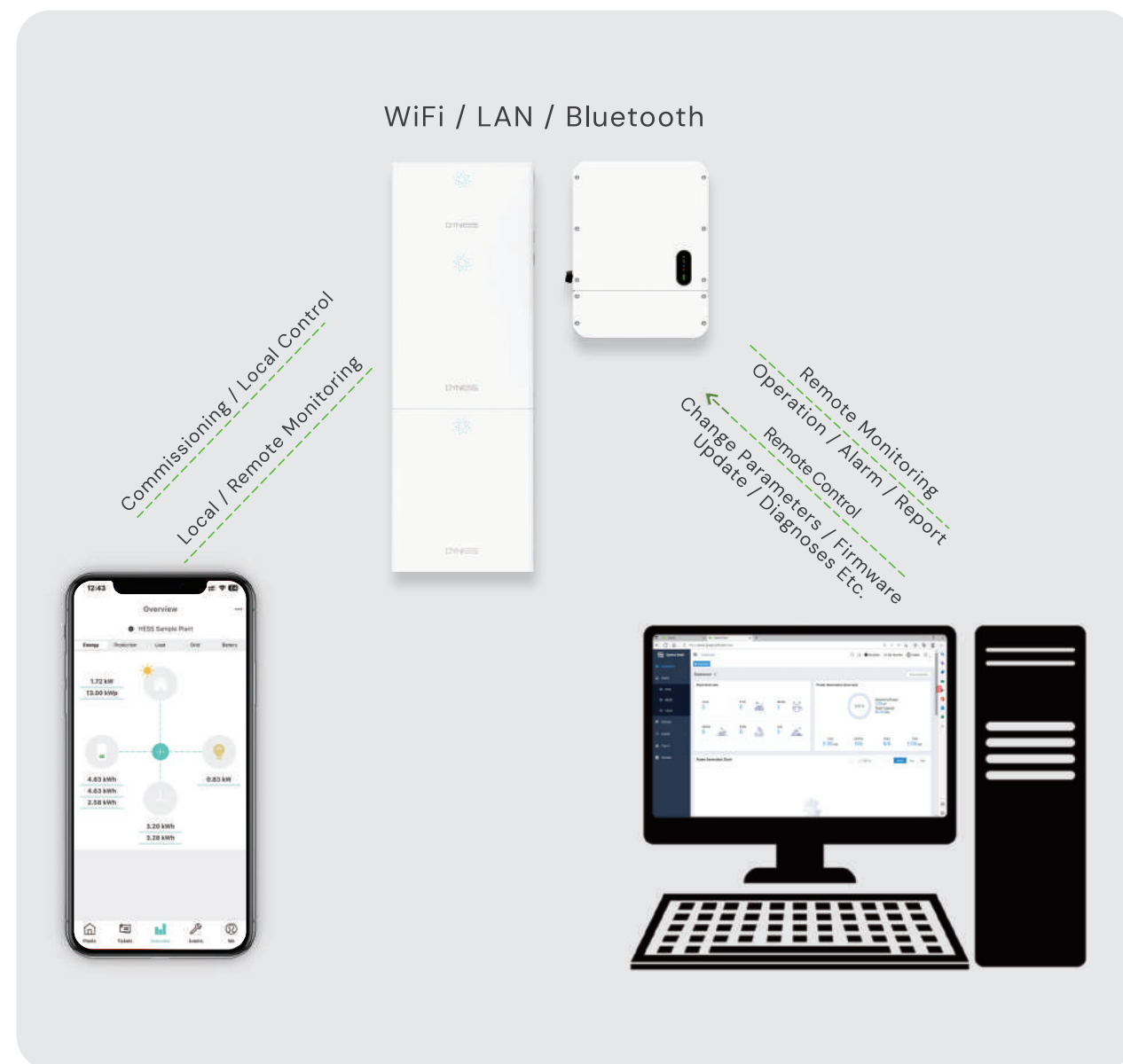
1. BLUE-Charging/Discharging/Standby
2. RED-Fault
3. Blue Twinkling-Standby
4. Blue Beaming-Blooming mode for discharging
5. Blue Beaming-Centralizing light for charging

Intelligent

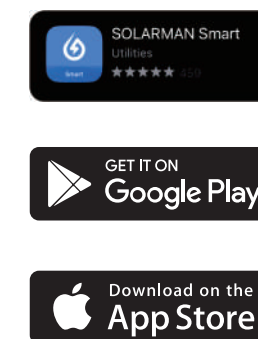
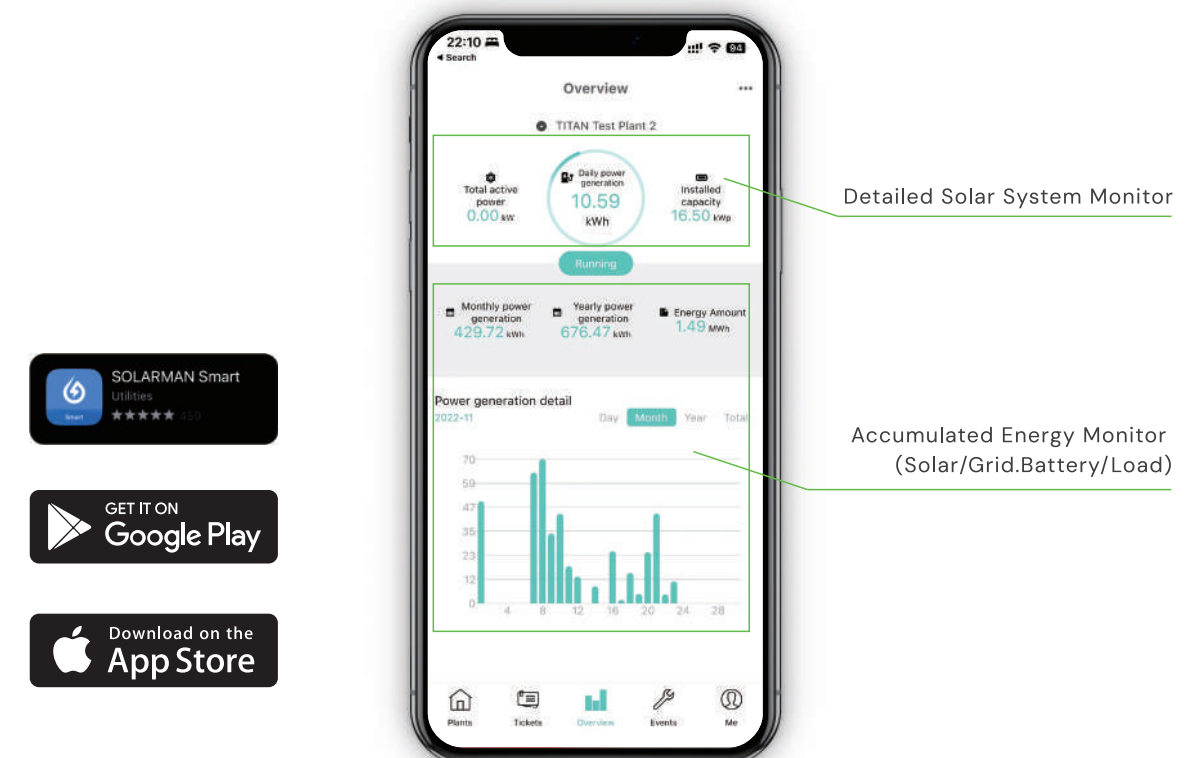
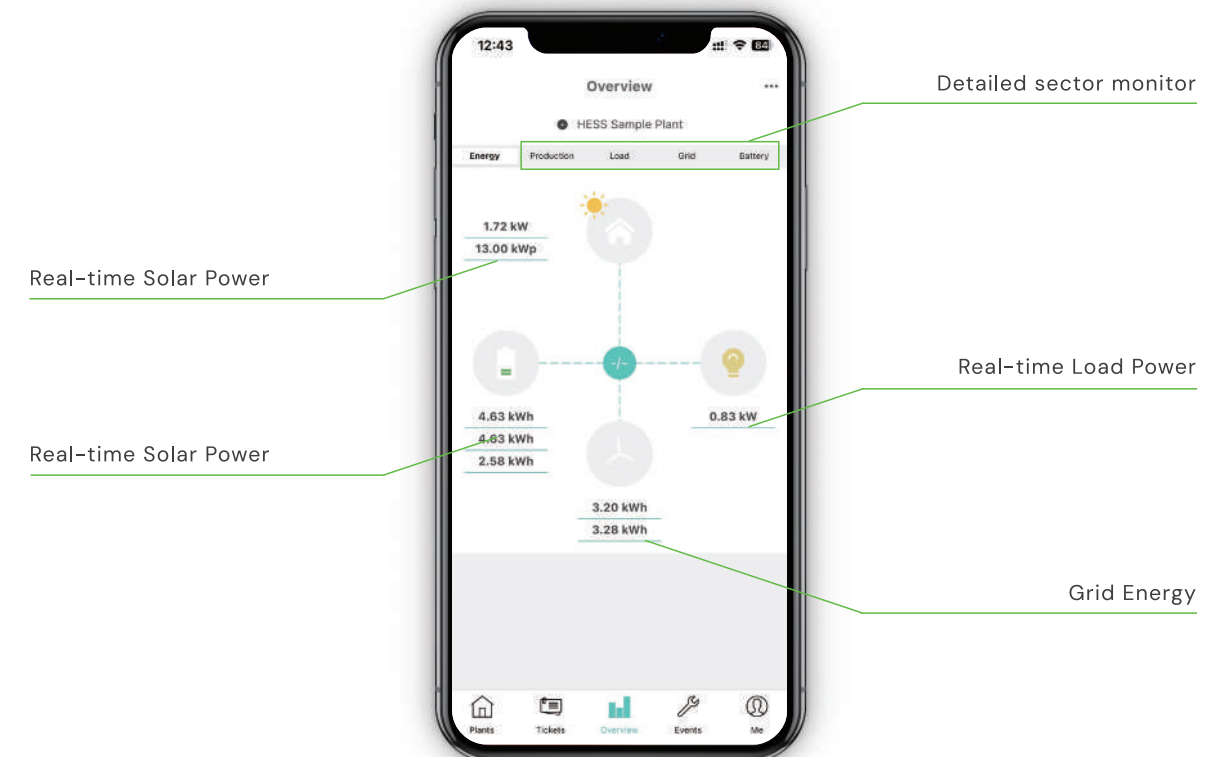
◆ Full System Monitoring & Easy Commissioning

Dyness APP for Smart phones is a comprehensive platform for system monitoring / commissioning and general O&M.

- Multiple Controllable Options
- Automatic Guide to Next Step
- For Both Installers and Users
- All Functions in One App

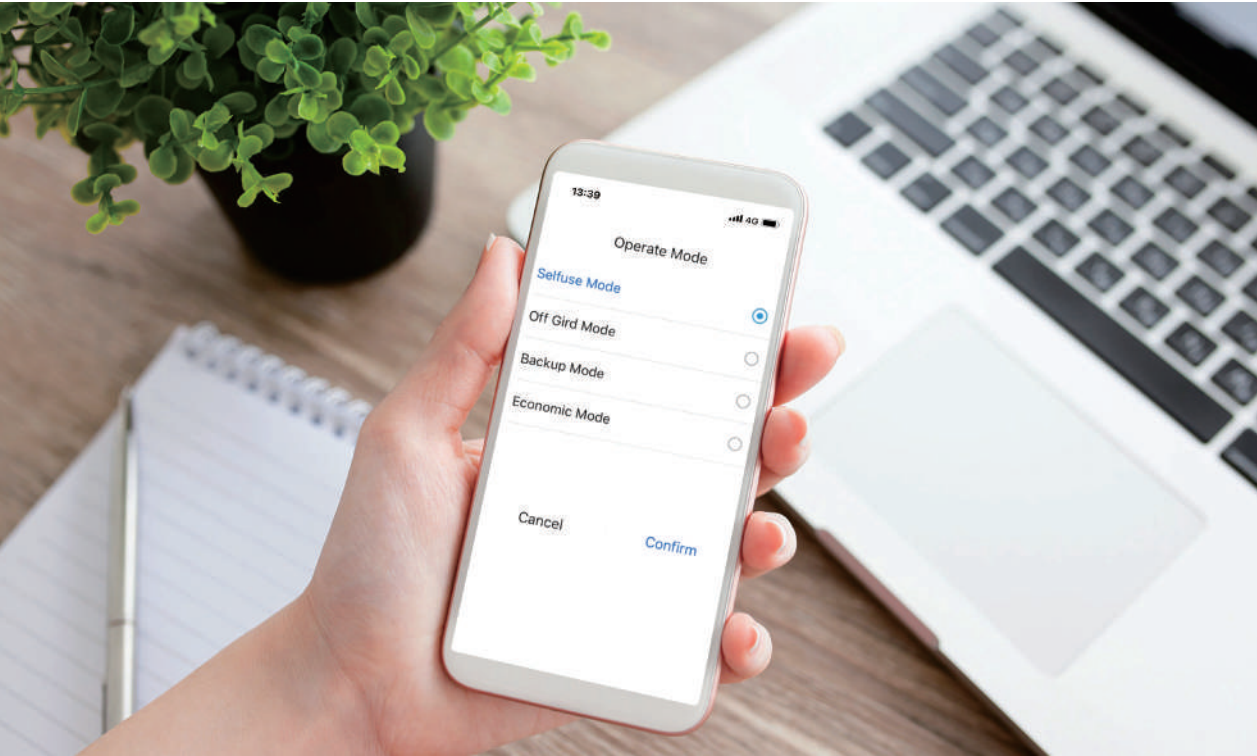
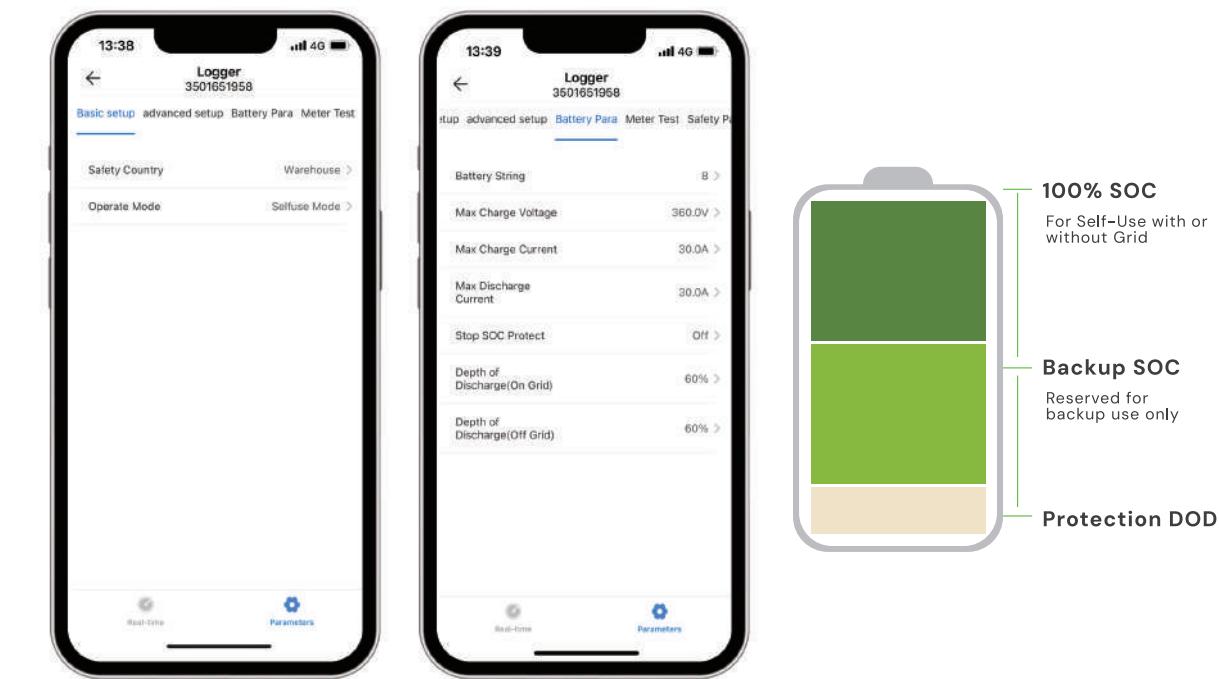


DYNESS monitoring platform provides insight into household PV production and consumption, displaying the power flow between the PV array, battery, grid and housing electrical consumption loads, tracking real-time system data. Besides, the web monitoring platform is also a good option for checking data, which provides a more detailed running system, historical data, and operations analysis.



◆ **Battery Performance Management**

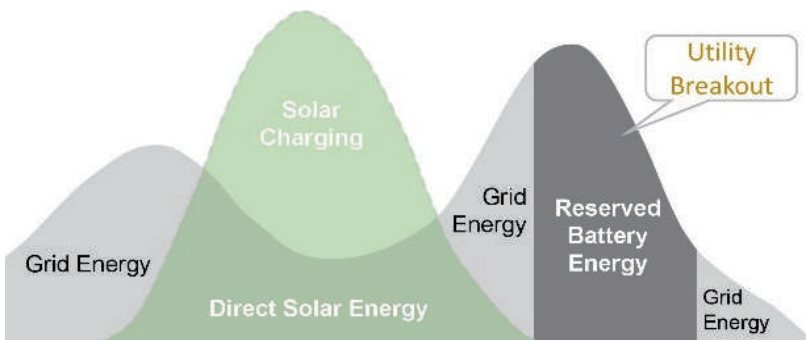
You are able to manage battery use based on your willings. Battery could be commissioned for self use to reduce electricity billings, or part of battery capacity could also be reserved for backup use only to protect your house from unexpected electricity blackout.



◆ **Multiple Operation Mode**

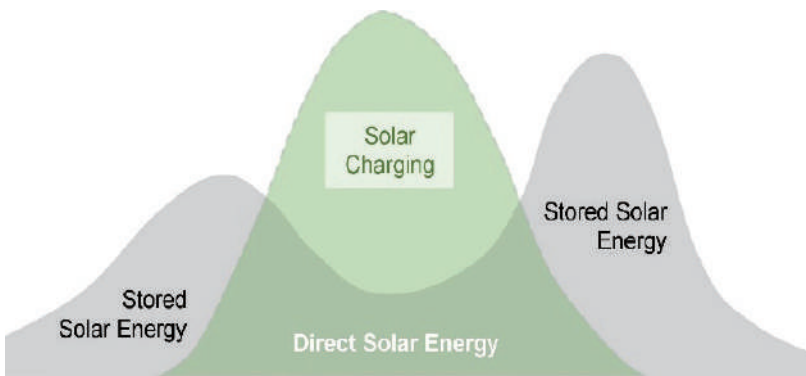
Backup Mode

The backup system works as a supplementary part of the Grid, supporting energy consumption to consumers.



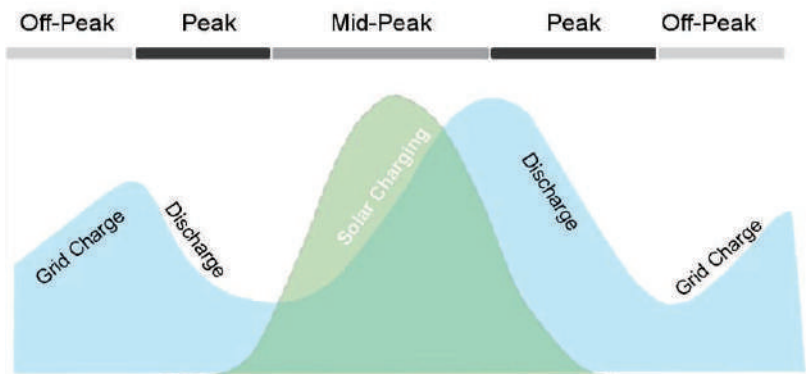
Self-use Mode

Self-use mode works for meeting the daily energy consumption all the battery energy can be output to loading ends.



Economic Mode

The economic mode is also the mode of TOU. The system discharges when the electricity price is high and vice versa for charging.



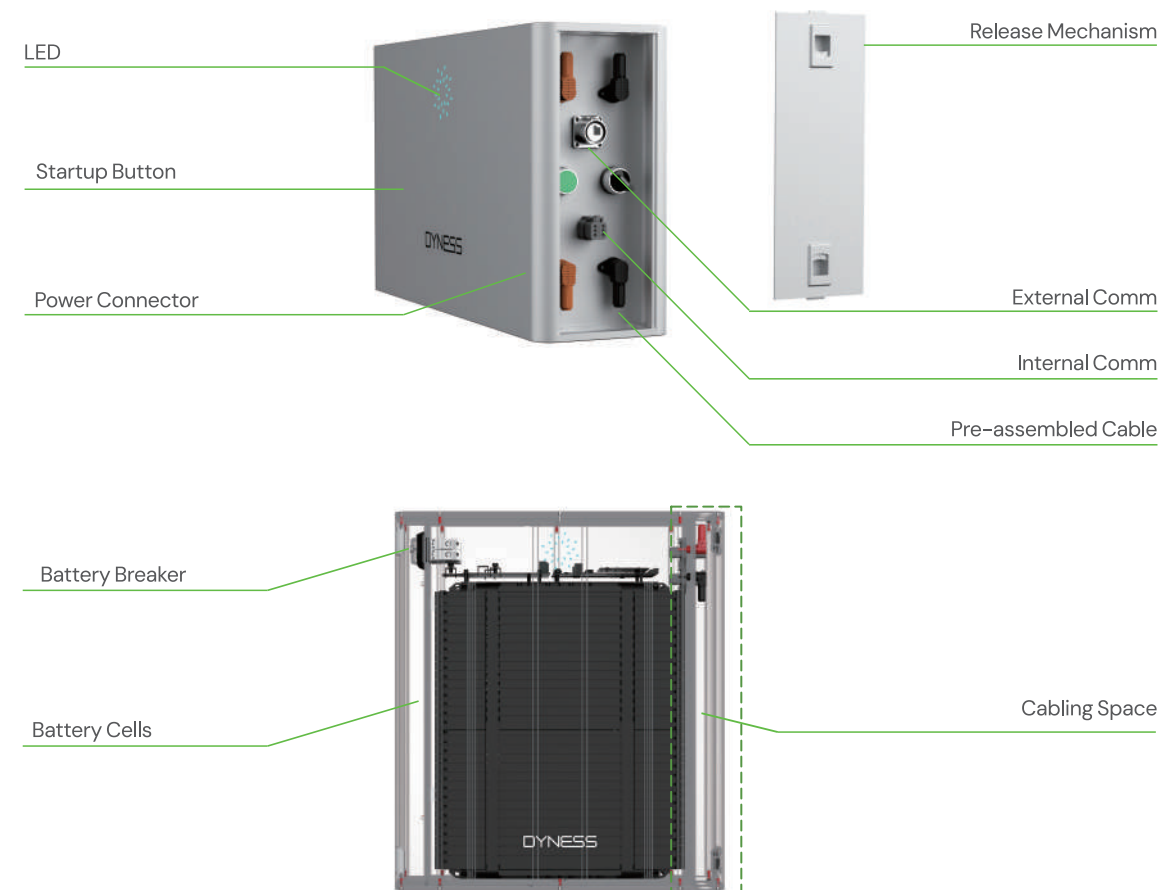
Flexible

Flexible Space Options

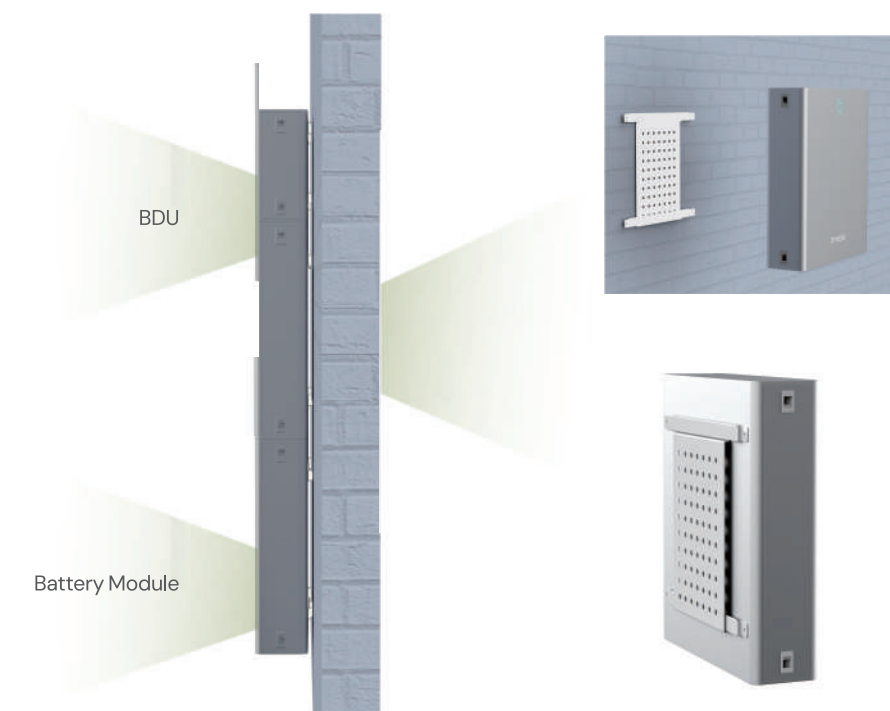
DYNESS Orion system, Tower-US and Powerbox-US series can meet different installation requirements, displaying types of physical combination forms, minimizing the space needs, which satisfy complicated conditions, like garage walls or basements.



All new smaller footprint design, the whole system for installing narrow space.



By adopting a smaller footprint design, the entire system is fit for narrow-space installation. The design of a single battery module with a bracket reduces the pressure of the entire battery module on the mounting wall. Standard cables on the Orion system ensure the plug & play installation (Tower-US also shares the plug & play function and cordless design). Each Orion battery module has its switch.



Reduce Soft Cost: Easy Installation and O&M

Installation contributes to most of the system's soft spend. An easy installation design helps to reduce entire system costs.

Easy Installation

DYNESS battery is designed to reduce installation & commissioning time and prevent faulty installations.

Single Battery Module Weight: 127.9lb
Energy Range: 9.9-19.9kWh



◆ Flexible Combination

- ▶ DYNESS battery system stores solar energy, to provide power supply during blackouts.
- ▶ Fit for household consumption demand from 10kWh to 20kWh.
- ▶ Flexible battery capacity combinations.
- ▶ Automatic switch to backup mode.
- ▶ Support Full-House backup and Essential backup scenarios.



Hybrid DC Coupled System



LFP Cells, Extendable Capacity



Capacity: 7.6kW / 9.6kW / 11.4kW + 10kWh / 15kWh / 20kWh



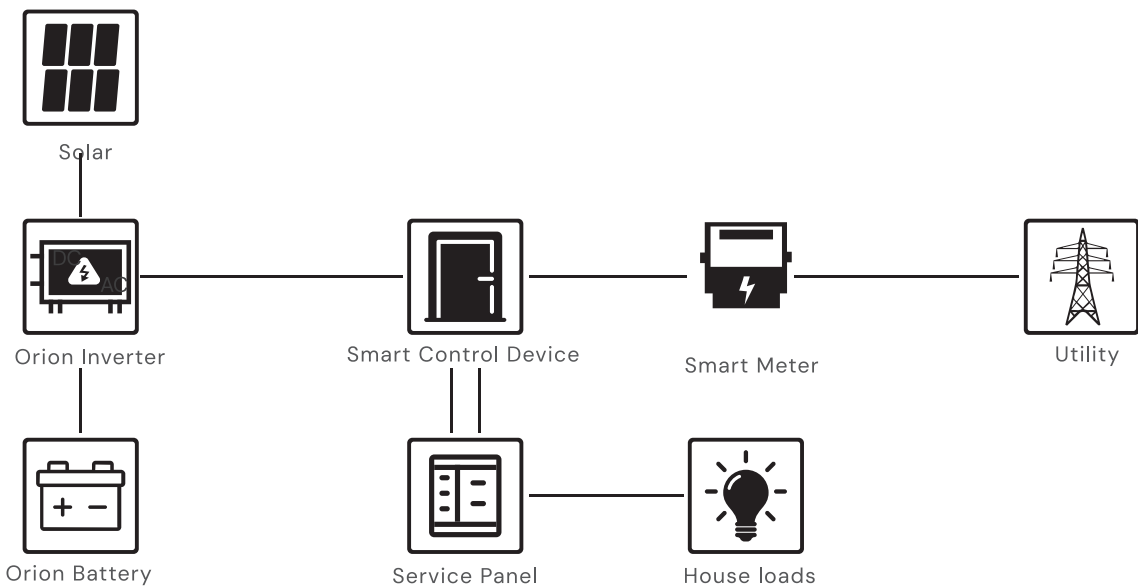
Full House Backup & Partial Backup



Compact Design

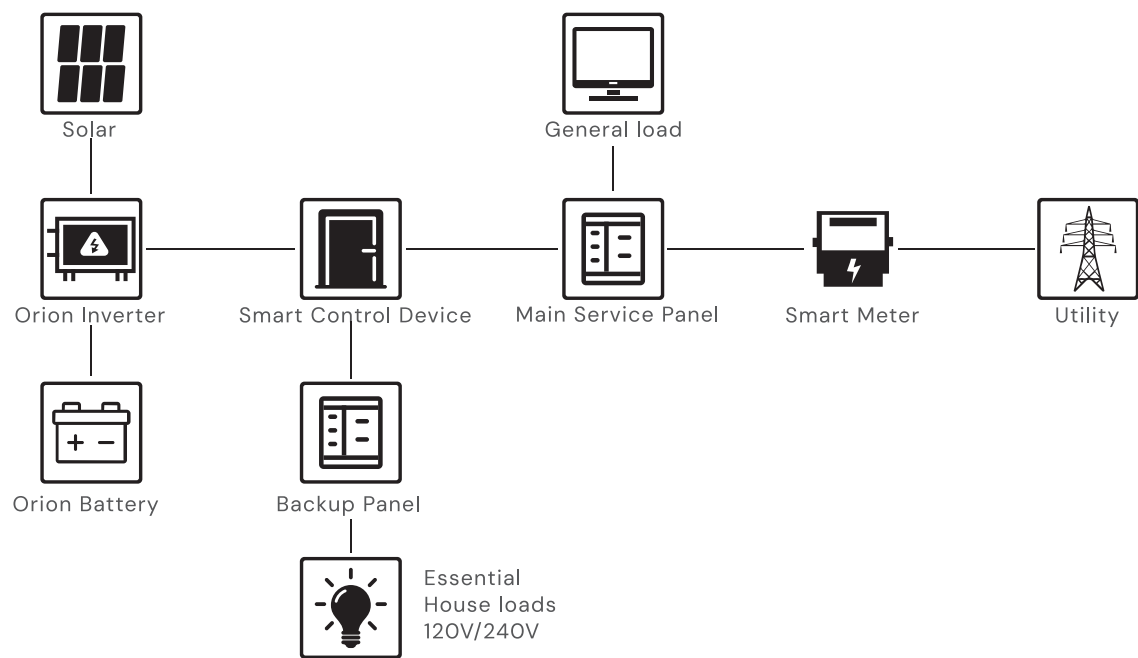
◆ Full Backup

DYNESS provides a Smart Control Device that can automatically switch and cover the entire load of your house during blackouts, especially when multiple loading consumption needs to be supported.



◆ Essential Backup Solution

It is clear which loads will need power, or if you want to confirm that the essential loads have sufficient power during a blackout, the Essential Backup system will be a good choice.



Residential Application Cases



• 40.96kWh
8 units DL5.0C South Africa



• 14.21kWh
Tower T14 Sri Lanka



• 10.66kWh
Tower T10 Czech Republic



• 48kWh
10 units A48100 Lebanon



• 10.24kWh
Powerbox G2 Romania



• 61.44kWh
12 units DL5.0C Yemen



• 19.2kWh
4 units A48100 South Africa



• 19.97kWh
Orion19.9 The United States



• 61.44kWh
6 units Powerbox Pro South Africa

C&I Application Cases



• **Brazil** 100kW/307kWh
 PowerRack HV4 Dynamic capacity expansion (peak-shaving) + PV consumption



Netherland
 DH200F 200kW/430kWh
 Peak-shaving + PV consumption+ Charging pile



• **Hungary** 500kW/1160kWh
 DH200Y Self-generation and self-use+PV consumption



• **Bulgaria** 112.64 kWh
 PowerRack HV4F Peak-to-valley arbitrage+Self-generation and self-use



• **The Netherlands** 100kW/215kWh
 DH200F PV consumption (self-use)



• **China** 5MW/18MWh
 DH200F Peak-shaving+PV consumption



• **China** 100kW/215kWh
 DH200F Peak-to-valley arbitrage + Peak-shaving

After-sales Service

Online + offline comprehensive operation and maintenance service system

+86 400 666 0655



Offline

- 8 Supporting Languages
- 13 Service Centers
- Worldwide Service Locations



Online

- Sophisticated Online Service Platform
- 200+ Online Service Engineers
- <https://support.dyness.com>



Professional

Localized technical support and customized service solutions.



Efficient

After-sales service response time is less than 1 hour.



Responsible

Customer centricity and 98% customer satisfaction

