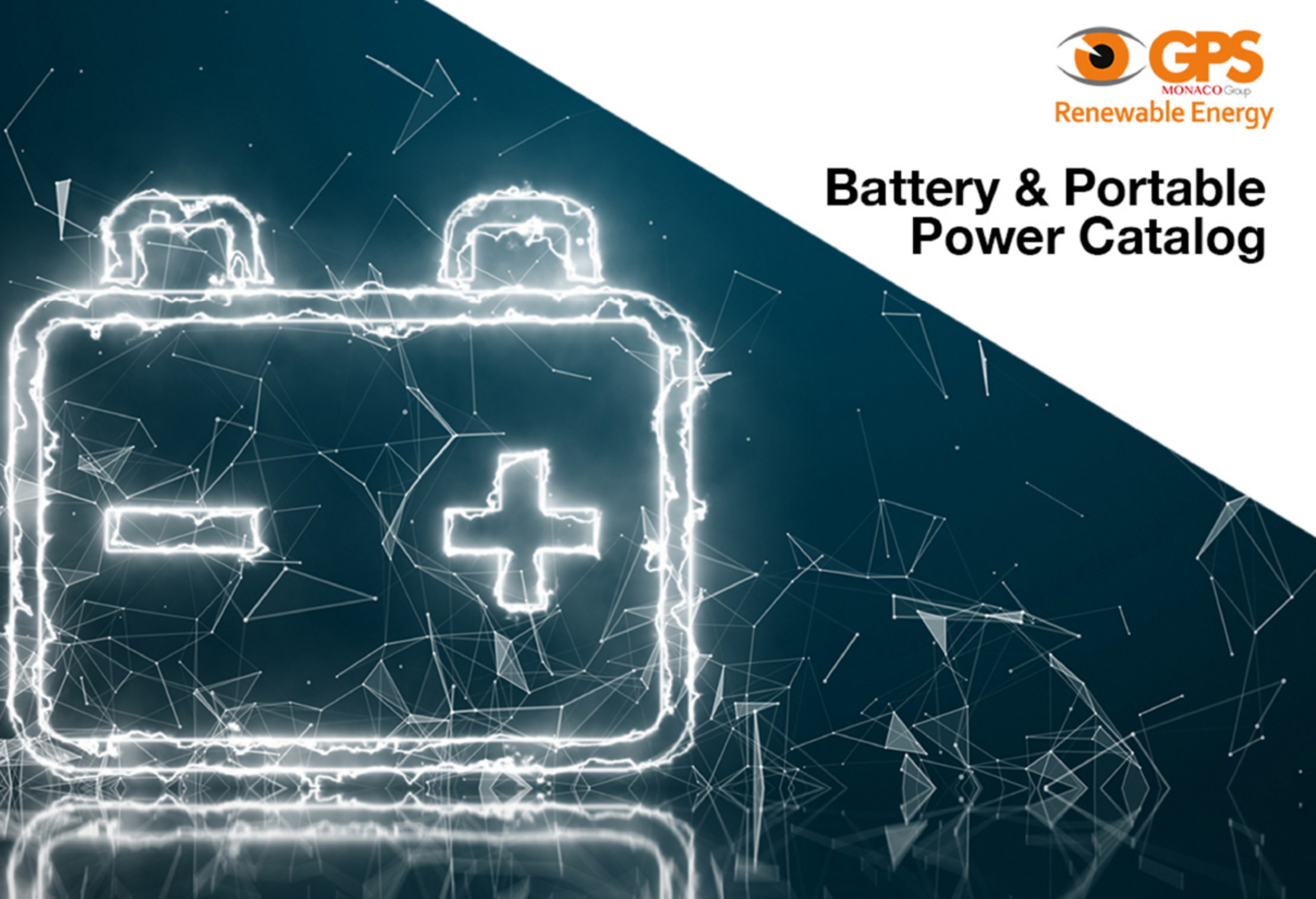


Battery & Portable Power Catalog



HYBRID STORAGE INVERTER

Single Phase



Features

Excellent Output Capability

1. 10% over power support for 10s.
2. Capable of being grid-tied or off-grid.
3. Realizing self-generation and self-use with photovoltaic and battery inputs.

UPS Function Available

1. UPS function with 10 ms automatic switchover.
2. Enhanced dynamic MPPT algorithm to ensure accurate and real-time power tracking.

Intelligent Monitoring, User Friendly

Easy connector for GPRS or WiFi module, Remotely monitoring system anytime and anywhere through web portal or mobile APP.



Model	5KW	6KW	7.5KW
Battery Input Data			
Battery Type	Li-Ion, Lead-Acid		
Nominal Battery Voltage (V)	48		
Battery Voltage Range (V)	38 ~ 60		
Max. Charge / Discharge Power (W)	3000 / 3000	4000 / 4000	4200 / 5000
Max. Charge / Discharge Current (A)	60 / 60	80 / 80	80 / 100
BMS Communication Port	CAN2.0 / RS485		
PV String Input Data			
Max. DC Input Power (W)	4600W / 2300W	6000W / 3000W	7500W / 3750W
Max. DC Voltage (V)	600	600	600
Operating MPPT Voltage Range (V)	100 ~ 550	100 ~ 550	100 ~ 550
Full Load MPPT Range (V)	210 ~ 480	230 ~ 480	255 ~ 480
Start Up Voltage / Initial Feeding Voltage (V)	70 / 150	70 / 150	70 / 150
Turn Off Voltage (V)	60	60	60
Max. DC Current Per Tracker (A)	15		
Number Of Independent MPPT Inputs / Strings per MPPT Input	2/1		
Max. Power per Tracker (W)	2300	3000	3750
AC Output Data (On-Grid)			
Rated Power (W)	3000	4000	5000
Max. AC Apparent Power (VA)*	3000	4000	5000
Nominal AC Voltage Range (V)	187 ~ 270	187 ~ 270	187 ~ 270
Nominal Frequency (Hz)*	50 / 60	50 / 60	50 / 60
Max. AC Current (A)	17.5	22	25
Power Factor	0.9i ~ 0.9c	0.9i ~ 0.9c	0.9i ~ 0.9c
Total Harmonic Distortion (THD) (%)	< 3	< 3	< 3
AC Output Data (Back-up)			
Max. AC Apparent Power (VA)*	3000	4000	5000
Peak Output Power (VA)**	6000, 10sec	8000, 10sec	10000, 10sec
Nominal AC Voltage Range (V)	230	230	230
Nominal Frequency (Hz)*	50/60	50/60	50/60
Max. AC Current (A)	17.5	22	25
Output THDv (@Linear Load) (%)	< 3		
Switch Time (ms)	< 10		
Efficiency			
Max. Efficiency (%)	97.6	97.6	97.6
Euro Efficiency (%)	97.0	97.0	97.0
Max. Battery Charging / Battery Discharging Efficiency (%)	94.3 / 94	94.3 / 94	94.3 / 94
MPPT Efficiency (%)	99.9	99.9	99.9
Loss at Standby / Loss at Night (W)	< 5W / < 0W	< 5W / < 0W	< 5W / < 0W
Safety and Protection			
Array Ground Insulation Resistance Monitoring	Integrated		
Ground Fault Monitoring/Grid Monitoring	Integrated		
Array Polarity Reverse Protection	Integrated		
All-pole Sensitive Residual Current Monitoring Unit	Integrated		
Anti-island Protection	Integrated		
Surge Protection	Integrated		
Protection Class	I		
Overvoltage Category	PV II / Mains III		
General Data			
Dimensions (W/H/D)(mm)	576*536*162	576*536*162	576*536*162
Weight of Inverter (Kg)	19	19.5	20
Battery / PV / AC Connection	Connector		
Mounting	Wall Mounted		
Display	LCD, Mechanical Key		
Interface: Speedwire / Webconnect	RS485 / Digital IO / Wifi / Bluetooth		
Operating Temperature Range (°C)	-25 ~ +60°C, Derating When Temperature > 45°C		
Noise (DB)	< 40		
Topology	Transformer Less For PV / High Frequency Isolated For Battery		
Cooling	Smart Fan Cooling		
Protection Degree	IP65		
Max. Altitude (Above Sea Level)	< 2000		
Relative Humidity (%)	0 ~ 95, Non Condensing		
Certificates	AS 4777.2, CEI 0-21, EN 50549, G99, IEC 62109, RD1699, VDE-AR-N4105, VDE0126-1-1, IEC 61727		

* May vary depending on specific country grid standard

HYBRID STORAGE INVERTER

Three Phase



Hybrid All-in-one Inverter Design



IP65 Waterproof



Wide Battery Voltage 180 ~ 750V



1.5~2 DC / AC Ratio



UPS Function with 10ms Automatic Switchover



100% Three-phase Imbalance Output



Smart Phase-level Power Export Limitation



Intelligent Monitoring



Model	UN33K	UN35K	UN37K	UN39K
Battery Input Data				
Battery Type	Lithium battery			
Battery Voltage Range (V)	180 ~ 750			
Max. Charge/Discharge Current(A)	30 / 30			
Max. Charge/Discharge Power(W)	8800	11000	13200	15000
PV String Input Data				
Max. PV Input Power(W)	17000	21500	22500	22500
Full Max. PV Input Voltage (V)	1000			
Full Load MPPT Range(V)	200 ~ 850			
SPS Start-up Voltage (V)	180			
MPPT Range For Nominal Power (V)	280 ~ 800	350 ~ 800	280 ~ 800	350 ~ 800
Nominal PV Input Voltage (V)	620			
Max. Input Current(A)	15 / 15	15 / 15	15 / 30	15 / 30
Max. Short Current(A)	20 / 20	20 / 20	20 / 40	20 / 40
No. of MPPT Trackers	2		2	
Strings per MPPT Tracker	1		1 / 2	
AC Output Data (On-grid)				
Nominal Power Output to Grid (VA)	8000	10000	12000	15000
Max. Power Output to Grid (VA) *	8000	10000	12000	15000
Max. Power From Grid (VA)	16000	20000	24000	25000
Nominal Output Voltage (V)	400 / 380, 3L / N / PE			
Nominal Output Frequency (Hz)	50 / 60			
Max. AC Current to Grid (A)	12.1	15.2	18.2	22.7
Max. AC Current From Grid (A)	24.2	30.3	36	36
Output Power Factor	1 (Adjustable from 0.8 leading to 0.8 lagging)			
Output THDi (Nominal Power) (%)	< 3			
AC Output Data (Back-up)				
Max. Output Power(VA)	8000	10000	12000	15000
Peak Output Power(VA)**	16000, 10sec	20000, 10sec	24000, 10sec	24000, 10sec
Max. Output Current(A)	12.1	15.2	18.2	22.7
Nominal Output Voltage (Vac)	3 / N / PE, 220 / 380, 230 / 400			
Nominal Output Frequency (Hz)	50 / 60			
Output THDv (@Linear Load) (%)	< 3			
Switch Time (ms)	< 10			
Load Control	YES			
Three Phase Unbalance	YES			
Efficiency				
MPPT Efficiency (%)	99.90	99.90	99.90	99.90
Max. Efficiency (%)	98.30	98.30	98.40	98.40
Euro-efficiency (%)	97.50	97.60	97.60	97.60
Safety and Protection				
Anti-island Protection	Integrated			
PV & Battery AFCI	Optional			
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 Type II / AC TypeIII			
Communication Interface				
Battery BMS	CAN			
EMS	RS485			
Meter	RS485			
DRED / RCR	YES (DI)			
Remote Shutdown	YES (DI)			
Dry-Point	YES (DO)			
Cloud	Wi-Fi, Bluetooth, 4G (Optional)			
Display / User Interface	LED / APP			
General Data				
Operating Temperature Range (°C)	-25°C ~ 60°C			
Relative Humidity (%)	0 ~ 100			
Operating Altitude (m)	≤ 2000			
Cooling	Nature Cooling		Smart Fan Cooling	
Noise (DB)	< 35		< 50	
Weight (kg)	29			
Size (W/H/D) (mm)	500*550*218			
Installation	Wall-Mounted			
Protection Degree	IP65			
Certifications & Standards				
Grid Regulation	CEI0-21; VDE4105-AR-N; VDE0126-1-1; EN50549; G98, G99, G100			
Safety Regulation	IEC62109-1&2			
EMC	EN610006-1, EN61000-6-2, EN610006-3, EN61000-6-4, EN61000-4-16, EN61000-4-18, EN61000-4-29			

* May vary depending on specific country grid standard
 ** Can be reached only if PV and battery power are enough

OFF-GRID SOLAR INVERTER (3.6KW/5KW)



Features



POWERFUL PERFORMANCE

1. Wide utility input range (90Vac-280Vac) for unreliable grid.
2. Built-in MPPT with Max 100A charging current.
3. High efficiency pure sine wave inverter (PF=0.8~1).
4. 2 times peak power ability for 5 seconds.



FLEXIBILITY

1. Max. parallel connection up to 9 units.
2. Available for field repairs through replacement boards and spare parts.



USER-FRIENDLY

1. Mechanical button and LCD display for easy operation.
2. Remote monitoring to get real-time running status.
3. Intelligent working mode enables grid or solar input prioritization.



Model	MP-3.0	MP-5.0
Input		
Nominal Voltage (Vac)	230	
Selectable Voltage Range (Vac)	170 ~ 280 (For Personal Computers)	
	90 ~ 280 (For Home Appliances)	
Frequency Range (Hz)	50Hz / 60Hz (Auto sensing)	
Battery		
Nominal Battery Voltage (V)	48	
Battery Voltage Range (V)	40 ~ 58	
Battery Type	Lithium/Lead-acid	
Solar Charger		
Max. PV Input Power (W)	4500	6000
Max. PV Input Voltage (V)	450	
MPPT Range (V)	120 ~ 430	
MPPT Trackers/String per Tracker	1/1	
Max. PV Input Power (A)	80	100
Max. Efficiency (%)	93	93
AC Charger		
Rated Output Power (V)	220 / 230 / 240	
Max. AC Charge Current (A)	60	80
AC Voltage Range (Vac)	180 ~ 275	
Frequency Range (Hz)	50±5Hz / 60±5Hz	
Inverter Output		
Max. AC Charge Current (W/VA)	3600 / 3600	5000 / 5000
Parallel Capacity	Max.9 units	
Nominal Output Voltage (V)	220 / 230 / 240	
Nominal Output Frequency (Hz)	50Hz / 60Hz by setting	
Surge Power (W)	7200	10000
Max. Efficiency (%)	93%	
THDv (%)	< 5%	
Transfer Time (ms)	10ms (For Personal Computers); 20ms (For Home Appliances)	
Output Mode	Off grid	
General Datameters		
Protection Degree	IP20	
Dimension (W/H/D) (mm)	315*477*131	
Weight (Kg)	13	
Operating Temperature (°C)	0 ~ 50	
Storage Temperature (°C)	-15 ~ 60	

AC COUPLED STORAGE INVERTER (3.6KW/5KW)



Features

Excellent Output Capability

1. Capable of being grid-tied or off-grid.
2. 10% over power support for 10s.
3. Available for inductive load like air conditioners or refrigerators.

UPS Function Available

UPS function with 10ms automatic switchover.

Intelligent Monitoring, User Friendly

Easy connector for GPRS or WiFi module, Remotely monitoring system anytime and anywhere through web portal or mobile APP.


Model	FS364	FS504
Battery		
Battery Type	Li-ion	Li-ion
Nominal Battery Voltage (V)	48	48
Battery Voltage Range (V)	42 ~ 58	42 ~ 58
Max. Charging Current (A)	75	100
Max. Discharging Current (A)	75	100
On Grid		
Max. Output Apparent Power (VA)	3680	5000
Max. AC Current Output (A)	16	24
Nominal Output Voltage (V)	230	230
AC Voltage Range (V)	187 ~ 270	187 ~ 270
Nominal Output Frequency (Hz)	50 / 60	50
Frequency Range (Hz)	45 ~ 55 / 55 ~ 65	45 ~ 55 / 55 ~ 65
Output Power Factor	>0.99 / 0.8 Leading... 0.8 Lagging	>0.99 / 0.8 Leading... 0.8 Lagging
Output THDi (@Nominal Output) (%)	< 3	< 3
Charging Power Factor	> 0.99	> 0.99
Off Grid		
Max. Output Apparent Power (VA)	3680	5000
Peak Output Apparent Power (VA)	4500, 10s	5500, 10s
Max. AC Current Output (A)	16	24
Nominal Output Voltage (V)	230	230
Nominal Output Frequency (Hz)	50	50
Output THDv (@Nominal Output, Linear Load) (%)	< 3	< 3
Efficiency		
Max. Battery Charge Efficiency (AC to BAT) (%)	94.7	94.7
Max. Battery Discharge Efficiency (BAT to AC) (%)	94.5	94.5
Safety and Protection		
Surge Protection	Yes	
Output Short Circuit Protection	Yes	
Protection Class	I	
Overvoltage Category	DC II / Mains III	
General Data		
Dimensions (W/H/D) (mm)	385*455*194	
Weight (Kg)	20	21
DC / AC Connector	Fastening Screw	
Cooling	Nature Cooling	
Mounting	Wall Mounted	
Protection Degree	IP65	
Operating Temperature Range (°C)	-25 ~ +60°C, Derating When Temperature > 45°C	
Relative Humidity (%)	0 - 95%, Non Condensing	
Operating Altitude (m)	< 2000	
Noise (DB)	< 35	
Topology	High Frequency Isolation	
Communication with BMS	CAN / RS485	
Communication with Meter	RS485	
Monitoring	WiFi / GPRS	
Firmware Upgrading	USB Disk	
HMI	LED&LCD, CapSen Key	
Certification	AS 4777.2, C10/11, CE, CEI 0-21, EN 50549, G99, DIN EN 62109, IEC 62109, RD1699, VDE-AR-N 4105, VDE0126-1-1, IEC 61727, IEC 62116R-N 4105, VDE0126-1-1, IEC 61727, IEC 62116	





GRID-TIED SINGLE PHASE PV INVERTER

One MPPT




 High Efficiency
97.3%


 IP65 Waterproof Design


 Single MPPT Tracker

 DC Level 2 Lightning Protection

 Fanless and Noiseless

 Wide Range of MPPT Voltage

 Compact and Robust

 Intelligent Monitoring

Model	PS-3000	PS-3000
Input (DC)		
Max. DC Input Power (W)	2200	3300
Max. DC Voltage (V)	550	550
Operating MPPT Voltage Range (V)	100 ~ 500	100 ~ 500
Full Load MPPT Range (V)	220 ~ 440	280 ~ 440
Nominal Input Voltage (V)	380	380
Star Up Voltage / Initial Feeding Voltage (V)	70 / 150	70 / 150
Turn Off Voltage (V)	60	60
Number of MPPT Trackers	1	1
Number of DC Connections / Tracker	1	1
Max. DC Current per Tracker (A)	12	12
Output (AC)		
Max. AC Output Power (VA)	2000	3000
Nominal AC Output Power (W)	2000	3000
Nominal AC Voltage (V)*	230	230
AC Voltage Range (V)	187 ~ 270	187 ~ 270
Nominal Frequency (Hz)*	50 / 60	50 / 60
Frequency Range (Hz)	45 ~ 55 / 55 ~ 65	45 ~ 55 / 55 ~ 65
Max. AC Current (A)	10	14
Power Factor	0.9i ~ 0.9c	0.9i ~ 0.9c
Total Harmonic Distortion (THD) (%)	< 3	< 3
Efficiency		
Max. Efficiency (%)	97.30	97.50
Euro Efficiency (%)	96.50	97.00
MPPT Efficiency (%)	99.90	99.90
Loss at Standby / Loss at Night (W)	<5 W / <0.5W	<5W / <0.5W
Safety and Protection		
Array Ground Insulation Resistance Monitoring		Yes
All-pole Sensitive Residual Current Monitoring		Yes
Array Polarity Reverse Protection		Yes
Output Short Circuit Protection		Yes
Anti-island Protection		Yes
Surge Protection		Yes
Protection Class		Yes
Overvoltage Category		PV II / Mains III
General Data		
Dimensions (W/H/D) (mm)	389*284*126	349*284*126
Weight (Kg)	8.5	9
Protection Degree		IP65
Cooling		Natural Convection
DC Switch		Yes
DC Connector		Amphenol Connector
AC Connector		Plug-in Connector
Mounting		Wall Mounted
Operating Temperature Range (°C)		-25 ~ +60°C, Derating When Temperature > 45°C
Relative Humidity (%)		0 - 95%, Non Condensing
Max. Altitude (Above Sea Level) (m)		< 2000
Noise (DB)		< 25
Topology		Transformerless
Display		LCD, CapSense key
Data Communication Interfaces		WiFi / GPRS Optional
Certification	AS 4777.2, C10/11, CE, CEI 0-21, EN 50549, G99, DIN EN 62109, IEC 62109, RD1699, VDE-AR-N 4105, VDE0126-1-1, IEC 61727, IEC 62116	

*The AC voltage and frequency range may vary depending on specific country grid



GRID-TIED SINGLE PHASE PV INVERTER

Dual MPPT

Maximum Efficiency 97.5%

IP65 Waterproof Design

Dual MPPT Trackers

Wide Range Of MPPT Voltage

Support Export Control

DC Level 2 Lightning Protection

Fanless and Noiseless

Flexible Communication Methods

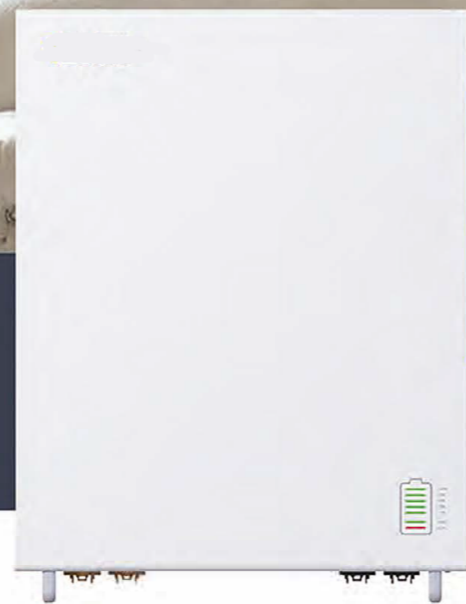
Model	PHASE	PHASE	PHASE
Input (DC)			
Max. DC Input Power (W)	4400	5500	6500
Max. DC Voltage (V)	550	550	550
Operating MPPT Voltage Range (V)	100 ~ 500	100 ~ 500	100 ~ 500
Full Load MPPT Range (V)	225 ~ 440	280 ~ 440	300 ~ 440
Nominal Input Voltage (V)	380	380	380
Start Up Voltage / Initial Feeding Voltage (V)	70/150	70/150	70/150
Turn off Voltage (V)	60	60	60
Number of MPPT Trackers	2	2	2
Number of DC Connections/Tracker	1	1	1
Max. DC Current Per Tracker (A)	12	12	12
Max. Power Per Tracker (W)	2500	3000	3500
Output (AC)			
Max. AC Output Power (VA)	4000**	5000***	6000
Nominal AC Output Power (W)	4000**	5000***	5750
Nominal AC Voltage (V)*	230	230	230
AC Voltage Range (V)	187 ~ 270	187 ~ 270	187 ~ 270
Nominal Frequency (Hz)*	50 / 60	50 / 60	50 / 60
Frequency Range (Hz)	45 ~ 55 / 55 ~ 65	45 ~ 55 / 55 ~ 65	45 ~ 55 / 55 ~ 65
Max. AC Current (A)	17.5	22	25
Power Factor	0.9i ~ 0.9c	0.9i ~ 0.9c	0.9i ~ 0.9c
Total Harmonic Distortion (THD) (%)	< 3	< 3	< 3
Efficiency			
Max. Efficiency (%)	97.50	97.50	97.50
Euro Efficiency (%)	97.00	97.00	97.00
MPPT Efficiency (%)	99.90	99.90	99.90
Loss at Standby / Loss at Night (W)	<5W / <0W	<5W / <0W	<5W / <0W
Safety and Protection			
Array Ground Insulation Resistance Monitoring		Yes	
All-pole Sensitive Residual Current Monitoring		Yes	
Array Polarity Reverse Protection		Yes	
Output Short Circuit Protection		Yes	
Anti-island Protection		Yes	
Surge Protection		Yes	
Protection Class		Yes	
Overvoltage Category		PV II / Mains III	
General Data			
Dimensions (W/H/D) (mm)	389*355*150	389*355*150	389*355*150
Weight (Kg)	14	14.5	14.8
Protection Degree		IP65	
Cooling Concept		Natural Convection	
DC Switch		Optional	
DC Connector		Amphenol Connector	
AC Connector		Plug-in Connector	
Mounting		Wall Mounted	
Operating Temperature Range (°C)		-25 ~ +60°C, Derating When Temperature > 45°C	
Relative Humidity (%)		0 - 95%, Non Condensing	
Max. Altitude (Above Sea Level) (m)		< 2000	
Noise (DB)		< 25	
Topology		Transformerless	
Display		LCD, CapSense key	
Data Communication Interfaces		WiFi / GPRS Optional	
Certification	AS 4777.2, C10/11, CE, CEI 0-21, EN 50549, G99, DIN EN 62109, IEC 62109, RD1699, VDE-AR-N 4105, VDE0126-1-1, IEC 61727, IEC 62116		

* The AC voltage and frequency range may vary depending on specific country grid

**power can derating to 3680VA

BATTERY PACK

Low Voltage



Wall-Mounted



Ultra Slim Design



LiFePO4 Batteries
Safe and Reliable



Remote Firmware
Upgrade



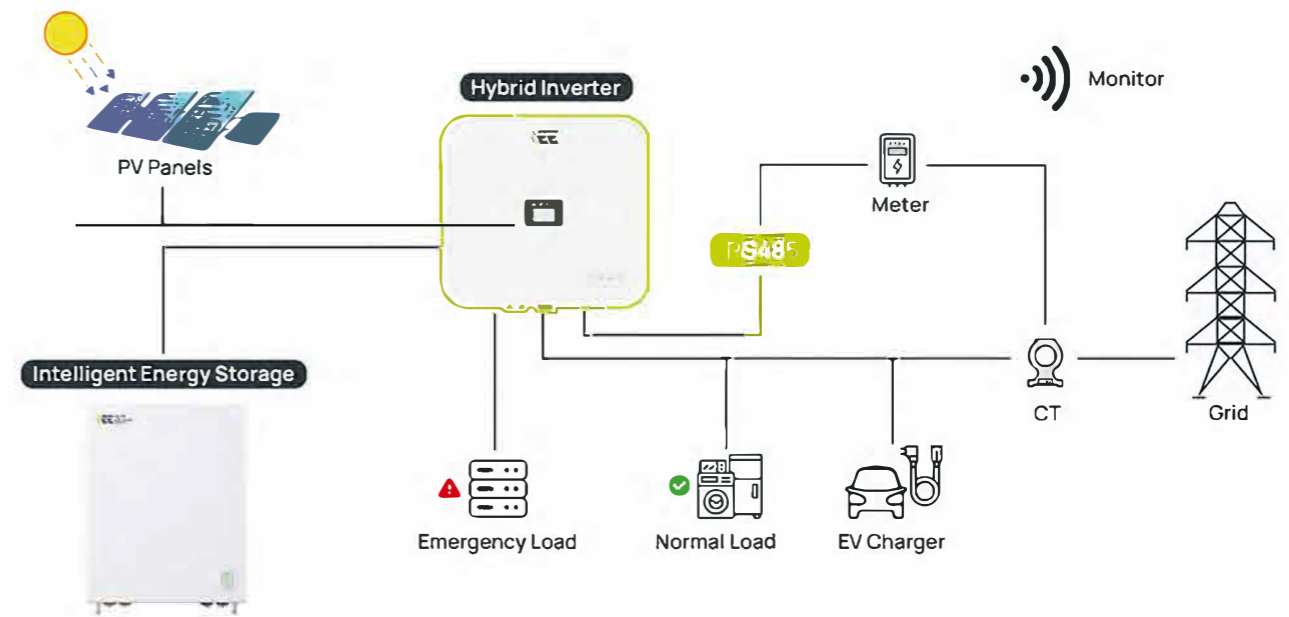
Modular Design
Scalable Up to 80kWh

BMS

Built-in BMS Module



Model		Notes
Electrical Parameters		
Nominal Energy	5120Wh	Standard Charge / Discharge Mode Test
Series/Parallel	16S1P	/
Nominal Capacity	100Ah	Standard Charge / Discharge Mode Test
Nominal Voltage	51.2V	/
Voltage Range	40~58.4V	Temperature Range : -20~60°C
Standard Charging	Constant Current Charging: 50A Charging Voltage: 58.4V Cut-off Current: 5A	Max. unit Voltage 3.65V
Max. Continuous Charging Current	Constant Current Charging: 100A Charging Voltage: 58.4V Cut-off Current: 5A	T ≥ 0°C; Max. unit Voltage 3.65V
Standard Discharge	Constant Current Discharge: 50A Cut-off Voltage: 40V	T ≥ 0°C; Min. unit Voltage 2.5V
Max. Continuous Discharge Current	Constant Current Discharge: 100A Cut-off Voltage: 40V	Min. monomer Voltage 2.5V
Life Cycle	Capacity Decay to 80Ah , Number of Cycles ≥ 6000;	90% DOD, @25±2°C (Standard Charge and Discharge Mode)
Monthly Self-discharge	<2% Per Month	After three months' shipment, The Battery will be charged to 30%SOC and stored at @ 25±2°C
Physical Parameters		
Battery Type	LiFePO4	/
Communication Equipment	RS485 / CAN	/
Storage Temperature	-20~65°C	Storage Environment Humidity ≤95%ROH, No Condensation
Operating Temperature	Charging: 0~55°C, ≤90%ROH; Discharging: -20~60°C, ≤90%ROH;	/
Dimension	(540*670*90) ±2mm	/
Weight	48±2Kg	/





BATTERY PACK

High Voltage



Safe
LiFePO₄ Battery and Intelligent BMS.

Reliable
Support High Discharge Power, BMS Intelligent Management.

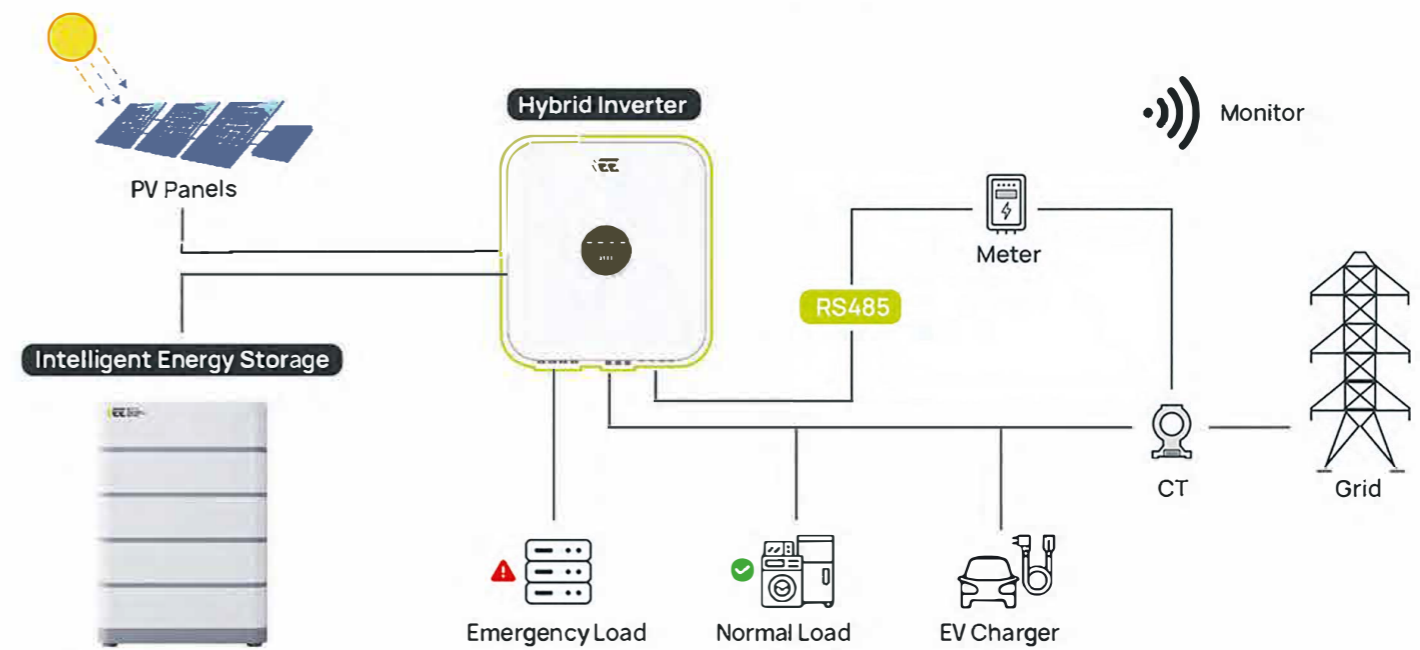
Flexible
2.88kWh Modular Design, Max.Capacity of 80kWh.

Eco-Friendly
Use Environmental Protection Materials, The Whole Module Non-toxic, Pollution-Free.

Convenient
Easy Maintenance, Remote Monitoring, and Remote Firmware Upgrade via APP.

Floor-Standing
Free-mounted Design, Floor-standing, Easy Installation.

Model	11.52kWh	14.40kWh	17.28kWh	20.16kWh
Technical Data Main Parameter				
Cell Type	LiFePO ₄			
Nominal Energy	11.52kWh	14.40kWh	17.28kWh	20.16kWh
Number of Battery Modules	4	5	6	7
Nominal Capacity	50Ah			
Nominal Voltage	230.4V	288.0V	345.6V	403.2V
Operating Voltage Range	201.6V~ 259.2V	252.0V~324.0V	302.4V~388.8V	352.8V ~ 453.6V
Charge Current/Max. Continuous	50A			
Discharge Current/Max. Continuous	50A			
Recommended Depth of Discharge	80%			
Operating Temp. Range/Charge	0°C ~ 50°C			
Operating Temp. Range/Discharge	-20°C ~ 55°C			
Other Parameter				
Dimensions (W*H*D)	570*819*367mm	570*969*367mm	570*1119*367mm	570*1269*367mm
Weight	139kg	165kg	191kg	217kg
IP	IP20			
Expansion	Max. 4 units in parallel operation			
Communication	CAN / WIFI			
Cooling Mode Display	Natural Cooling			
Cycles	6000@80% DOD, 25°C			
Design Life	15+ years			
Installation	Floor standing			
Allowed Humidity Range	≤ 95% RH			
Design Standard	UN38.3, IEC62619, CE-EMC			





PORTABLE ALL-IN-ONE ESS

- Rugged Wheels and Telescopic Pull Handle Convenient Transport
- ESS On & Off-Grid Hybrid All-in-one ESS
- Modular Design and Expandable Up to 20kWh
- Max 16A Input Current to Better Match High Power Panel
- With UPS Function Switch Time $\leq 10ms$
- Support AC Coupled & Easy Installation
- Wide PV Input Range 10~450V
- Auto Control off-grid Zero-ground Voltage Close To Zero



Model	
Battery Input	
Cell Type	LiFePO ₄
Battery Capacity (Wh)	5120
Battery Input Nominal Voltage (V)	51.2
Battery Input Voltage Range (V)	40~60
Nominal Charging Current (A)	65
Nominal Discharging Current (A)	90
Discharging Current (A)	100
Life Cycles (@25°C, 1C Discharge)	4000
AC Input	
AC Charging Power (W)	3600
Nominal Voltage (Vac)	230
Voltage Range (V)	180~270
Nominal Frequency (Hz)	50
Frequency Range (Hz)	45~55
Power Factor (@max. Charging Power)	>0.99
AC Output	
Nominal AC Power (W)	4000
Surge Power (W)	8000
Nominal Grid Voltage (Vac)	220 / 230 / 240
Nominal Grid Frequency (Hz)	50
Max.AC Current (A)	21
Nominal AC Current (A)	17.5
THDv at Nominal Power (%)	<1.5
PV Input(HV) MC4	
Max Solar Charging Input Power (W)	3000
DC Input Voltage Range (V)	50~450
Max DC / PV Input Current (A)	16
DC Input(LV) XT6	
Max Car Vcharging Input Power (W)	120
Max Solar Charging Input Power (W)	800
DC Input Voltage Range (V)	12~50
Max DC / PV Input Current (A)	20
DC Output	
XT60	12V/30A, 24V/25A, 36V/20A, 48V/20A
USB-TypeC2 (x2)	100W, 5V, 9V, 12V, 15V:3A, 20V:5A
Car Port (x1)	132W, 13.2V, 10A
Efficiency	
Battery to AC Max (%)	93
AC to Battery Max (%)	93
PV to AC Max (%)	97
PV to Battery Max (%)	95
Protection	AC output over current; AC output short circuit; AC charging over current; AC output over/under voltage; AC output over/under frequency; Inverter over temperature; AC charging over/under voltage; Battery temperature high/low; Battery over/under voltage;
General Data	
Dimensions (W/H/D) (mm)	510*730*235; (Battery:510*405*203; Inverter: 510*325*235;)
Weight (Kg)	65
LCD (mm)	97*48
Cooling Concept	Smart Fan Cooling
Operation Temperature Range (°C)	0~45°C (Charging) , -20~55°C (Discharging)
Operation Relative Humidity [RH(%)]	0-95%, Non Condensation
Ingress Protection	IP54 (IP65 Customized Available)
Noise (DB)	< 40
Communication Interface	WiFi



PORTABLE POWER STATION 1KW



100%, 1.5hour Super Fast Recharge



LiFePO4 Battery Safety Guarantee



Wireless Charger



10ms Switching Time Seamless UPS



1000W, Surge 2000W AC Output









APP Smart Control

Model	110Vac		230Vac	
	110Vac	230Vac	110Vac	230Vac
Battery Input				
Cell Type	LiFePO ₄			
Battery Capacity (Wh)	672		1008	
Battery Input Nominal Voltage (V)	22.4			
Battery Input Voltage Range(V)	18.2~26			
Nominal Charging Current (A)	25		36	
Nominal Discharging Current (A)	50		50	
Max. Discharging Current (A)	80		80	
Life Cycles (@25°C, 1C Discharge)	2000+			
AC Input				
AC Charging Power (W)	480		800	
Nominal Voltage (Vac)	110	230	110	230
Voltage Range (V)	90~140	180~270	90~140	180~270
Nominal Frequency (Hz)	60	50	60	50
Frequency Range (Hz)	55~65	45~55	55~65	45~55
Power Factor (@Max. Charging Power)	> 0.99			
DC Input				
Max. Car Charging Input Power (W)	120			
Max. Solar Charging Input Power (W)	200			
DC Input Voltage Range (V)	10~30			
Max DC/PV Input Current (A)	10			
AC Output				
Nominal AC Power (W)	600		1000	
Surge Power (W)	1200		2000	
Nominal Grid Voltage (Vac)	110	230	110	230
Nominal Grid Frequency (Hz)	60	50	60	50
Max. AC Current (A)	7.5	4	12.5	6.5
Nominal AC Current (A)	5.5	2.6	9	4.3
THDv at Nominal Power (%)	< 1.5			
DC Output				
USB-A (x1)	12W, 5V, 2.4A			
QC3.0 (x2)	18W Max per port, 5V / 3A, 9V / 2A, 12V / 1.5A			
USB-TypeC (x2)	100W Max per port, 5V, 9V, 12V: 3A; 20V:5A			
Car Port and DC Port Totally Max. Output	132W			
Car Port (x1)	132W, 13.2V, 10A			
DC Port (x2)	132W Max per port, 13.2V, 10A			
Wireless Charger (W)	10			
Efficiency				
Battery to AC Max (%)	92.5	93.0	92.5	93.0
AC to Battery Max (%)	92			
Protection	AC output over current; AC output short circuit; AC charging over current; AC output over/under voltage; AC output over/under frequency; inverter over temperature; AC charging over/under voltage; Battery temperature high/low; Battery over/under voltage			
General Data				
Dimensions (W/H/D) (mm)	348*264*192			
Weight (Kg)	9.5		11.1	
LCD (mm)	82*48			
Cooling	Forced Air Cooling			
Operation Temperature Range (°C)	0~40°C (Charging), -15~40°C (Discharging)			
Operation Relative Humidity [RH(%)]	0-95%, Non Condensation			
Ingress Protection	IP20			
Noise (DB)	< 65			
Communication Interface	WiFi			
LED Light (W)	3W			



PORTABLE POWER STATION 2KW



- 
 1920Wh
Huge Capacity
- 
 100%, 1.8 hours
Super Fast Recharge
- 
 Wireless
Charger
- 
 UPS & BMS
Protection & Safety
- 
 2000W, Surge 4000W
AC Output
- 
 Versatile
Output Ports

Model	2024		2025	
	110Vac	230Vac	110Vac	230Vac
Battery Input				
Cell Type	LiFePO ₄			
Battery Capacity (Wh)	1440		1920	
Battery Input Nominal Voltage (V)	48			
Battery Input Voltage Range (V)	40 ~ 60			
Nominal Charging Current (A)	25		25	
Nominal Discharging Current (A)	45			
Max. Discharging Current (A)	60			
Life Cycles (@25°C, 1C Discharge)	2000+			
AC Input				
AC Charging Power (W)	1200		1500	
Nominal Voltage (Vac)	110	230	110	230
Voltage Range (V)	90~140	180~270	90~140	180~270
Nominal Frequency (Hz)	60	50	60	50
Frequency Range (Hz)	55~65	45~55	55~65	45~55
Power Factor (@max. Charging Power)	> 0.99			
DC Input				
Max. Car Charging Input Power (W)	120			
Max. Solar Charging Input Power (W)	500			
DC Input Voltage Range (V)	10~50			
Max DC/PV Input Current (A)	11			
AC Output				
Nominal AC Power (W)	2000		2000	
Surge Power (W)	4000		4000	
Nominal Grid Voltage (Vac)	110	230	110	230
Nominal Grid Frequency (Hz)	60	50	60	50
Max. AC Current (A)	22	12	22	12
Nominal AC Current (A)	18	9	18	9
THDv at Nominal Power (%)	< 1.5			
DC Output				
USB-A (x1)	12W, 5V, 2.4A			
QC3.0 (x2)	18W Max per port, 5V / 3A, 9V / 2A, 12V / 1.5A			
USB-TypeC (x2)	100W Max per port, 5V, 9V, 12V: 3A; 20V:5A			
Car Port and DC Port Totally Max. Output	132W			
Car Port (x1)	132W, 13.2V, 10A			
DC Port (x2)	132W Max per port, 13.2V, 10A			
Wireless Charger (W)	10			
Efficiency				
Battery to AC Max (%)	92.5	93.0	92.0	93.0
AC to Battery Max (%)	93			
Protection	AC output over current; AC output short circuit; AC charging over current; AC output over/under voltage; AC output over/under frequency; inverter over temperature; AC charging over/under voltage; Battery temperature high/low; Battery over/under voltage;			
General Data				
Dimensions (W/H/D) (mm)	355*287*226		355*347*226	
Weight (Kg)	17.2		20.5	
LCD (mm)	97*48			
Cooling	Forced Air Cooling			
Operation Temperature Range (°C)	0~40°C (Charging), -15~40°C (Discharging)			
Operation Relative Humidity [RH(%)]	0-95%, Non Condensation			
Ingress Protection	IP20			
Noise (DB)	< 65			
Communication Interface	WiFi			
LED Light (W)	3W			

PORTABLE POWER STATION **4KW**





1800W
AC Super Charge


100%
in 3 hours


5120Wh Large
Battery Capacity


4000W
Surge Power Capability


1400W
UPS Backup


Versatile
Output Ports

Tech Specs

Weight
52Kg

Capacity
5120Wh

Operation temperature
0-40 °C / 32-110°F

Super-charge
Max1800W, AC100-120Vac Max15A

Adapter Charge
12V-120V / 15A, MAXimum 1000W

5 x AC
4000W total (Surge 8000W)

2 x USB-A, QC3.0
5V/3A ; 9V/2A; 12V/1.5A, 18W Max per port

1 x DC24V
24V10A socket

1 x Cigar lighter
12V/10A

Size
L550* W299* H487

Battery
LiFePO₄

Cycle Life
3500 cycles to 80% capacity

Storage temperature
-10-40 °C / -14-110°F

Solar Charge
1* XT60 Port, 12V-120V / 15A , MPPT MAX 1000W

Car Charge & Battery Charge
12V/8A - 24V/10A

2 x USB-A
5V/2.4A, 12W Max per port

2 x USB-C
PD-100W Max per port

2 x DC12V
12V3A socket

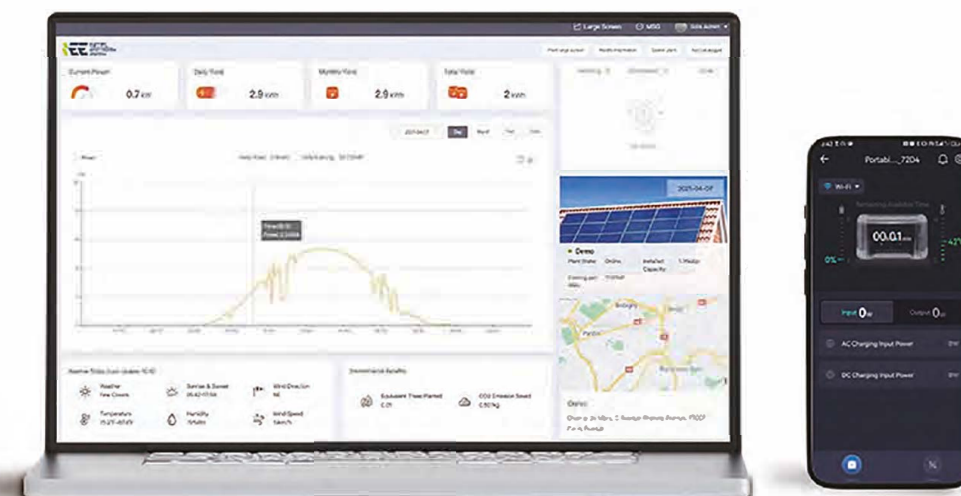
Warranty
2-Year



SOLAR PANEL



Model	100W	200W	400W
Electrical Parameters			
Cell Type	Monocrystalline Silicon	Monocrystalline Silicon	Monocrystalline Silicon
Operating Power (@STC)	100W (-5%, +10%)	200W (-5%, +10%)	400W (-5%, +10%)
Operating Voltage (@STC)	17.1V (-5%, +10%)	17.1V (-5%, +10%)	39.6V (-5%, +10%)
Operating Current (@STC)	5.85A (-5%, +10%)	11.7A (-5%, +10%)	10.1A (-5%, +10%)
Open Circuit Voltage (@STC)	19.8V (-5%, +10%)	19.8V (-5%, +10%)	46.8V (-5%, +10%)
Short Circuit Current	6.15V (-5%, +10%)	12.3V (-5%, +10%)	10.65V (-5%, +10%)
Physical Parameters			
Interface Type	MC4	MC4	MC4
Folding Type	4 Fold	4 Fold	4 Fold
Ingress Protection	IP68	IP68	IP68
Folded Dimension (mm)	588*368*82±5	591*588*82±5	1058*627*38±5
Unfolded Dimension (mm)	1287.2*588*35±5	2179.2*588*35±5	2365*1058*25±5
Net Weight (Kg)	5.2±0.5	9.3±0.5	19.5±0.5
Warranty	12 months	12 months	12 months
Applicable Models	Singo600, Singo1000	Singo2000, Singo2000Pro	Singo5000, SH4000S-5



Feature

We are designed with easy plug for GPRS / WiFi module and PLC kit, by which the inverters can be connected to internet. Users are allowed to remotely monitor the system through web portal or smartphone APP anytime and anywhere.

Smario Series	GPRS Plug	WiFi Module	PLC Kit
Model			
Electrical			
Supply Voltage	5~12Vdc	5~12Vdc	186V~270V; 50Hz/60Hz
Series/Parallel	Max. 6w Avg. 0.7w	Max. 2.5w Avg. 0.5w	1.5W
Interface			
Connection with Inverter	USB-C	USB-C	AC Cable
Electrical Interface	RS485	RS486	PLC
Baud Rate	9600bps	9600bps	9600bps
Data Transmission	GSM 850 / 900 / 1800 / 1900MHz	802.11b/g/n	Ethernet
Connection with Internet	Wireless	Wireless	RJ45
General Data			
Dimensions (W*H*D) (mm)	120*37*22	120*37*22	115*85*26
Weight (g)	About 60	About 50	About 150
Operation Temperature Range (°C)	-20~60	-20~60	-20~60
Storage Temperature Range (°C)	-20~60	-20~60	-20~60
Operation Relative Humidity (%)	0~100	0~100	0~90, Non Condensation
Ingress Protection	IP67	IP67	IP20
Anti UV	F1	F1	NA