sunvolt

ENERGY STORAGE SOLUTION

Energy Solutions by Panasonic

SUNVOLT ENERGY STORAGE SYSTEM

- Outdoor Installation
- Backup Power
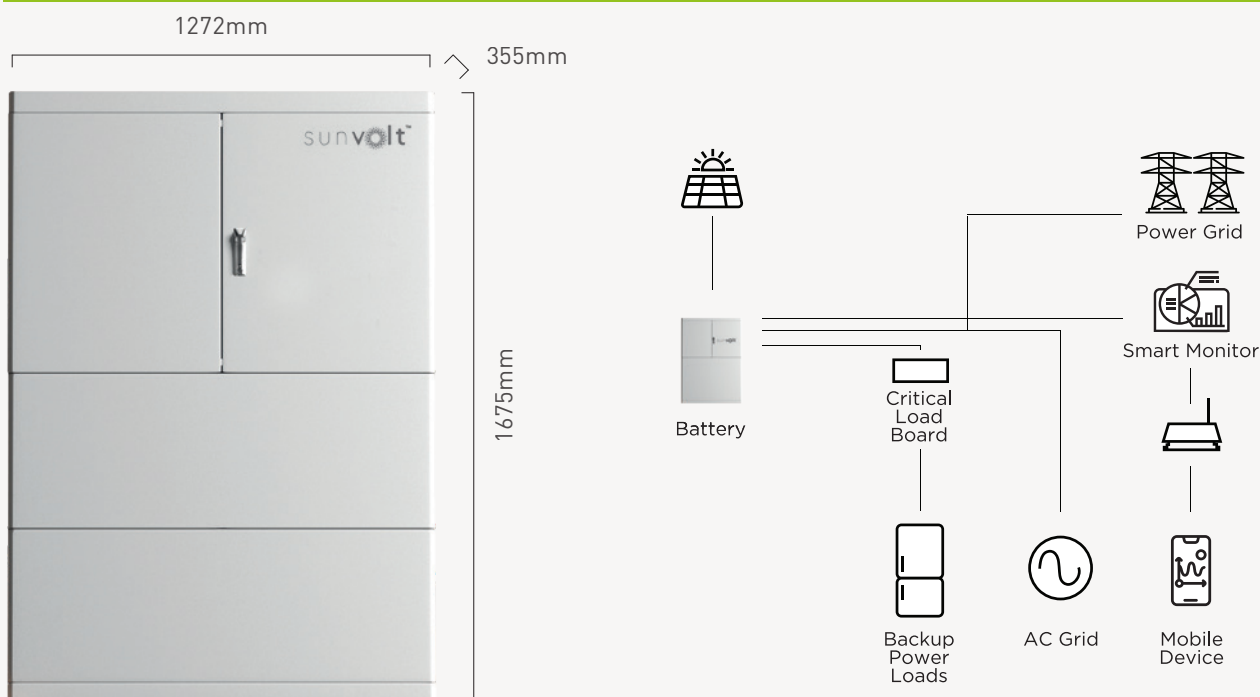- Integrated Isolators
- Pre-wired
- Mobile App

sunvolt™

1272mm

355mm

1675mm

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Power Grid

Smart Monitor

Battery

Critical Load Board

Backup Power Loads

AC Grid

Mobile Device

BATTERY

Technical Data	Battery System	2*Battery System	3*Battery System	4*Battery System
Rated Energy (kWh)	5.37 kWh	10.74 kWh	16.11 kWh	21.48 kWh
Usable Energy	4.83 kWh	9.66 kWh	14.49 kWh	19.32 kWh
Cell Type	LFP(LiFePO4)			
Cell Configuration	16S1P	16S2P	16S3P	16S4P
Rated Voltage (V)	51.2 V			
Operating Voltage (V)	47.2~58.08 V			
Max. Continuous Discharge Current (A)*	50A	100A		
Max. Discharge Power (kW)*	2.9 kW	5.8 kW		
Communication	CAN&RS485			
Weight (Kg)	50 Kg	100 Kg	150 Kg	200 Kg
Dimensions (W*D*H) (mm)	550*230*350 mm (Battery System)			
Operating Temperature (˚C)	Charge: 0 < T < 50˚C / Discharge: -10 < T < 50˚C			
Storage Temperature (˚C)	-20~40˚C (≤One Month) / 0~35˚C (≤One Year)			
Humidity	≤ 95%			
Altitude (m)	≤ 2000m			
Protection Degree	IP65 (Outdoor / Indoor)			
Installation Location	In Cabinet			
Standard and Certification	EMC, UN38.3			

Rated Energy*: Test conditions, Cell Voltage 2.5~3.65V, 0.5C charge & discharge at +25±3˚C.

Usable Energy*: Test conditions, 90% DOD, 0.5C charge & discharge at +25±3˚C.

Max. Continuous Discharge Current*/Power*: Max. Continuous Charge/Discharge and power derating will occur related to Temperature and SOC.

WARRANTY

5 Year Product Warranty. 10 Year Performance Warranty on Battery.
Terms & Conditions apply.

HYBRID INVERTER

Technical Data		GW5048D-ES
Battery Input Data	Battery Type	Li-Ion
	Nominal Battery Voltage (V)	48
	Max. Charging Voltage (V)	≤ 60 (Configurable)
	Max. Charging Current (A)*1	100
	Max. Discharging Current (A)*1	100
	Battery Capacity (Ah)*2	50~2000
	Charging Strategy for Li-Ion Battery	Self-adaption to BMS
PV String Input Data	Max. DC Input Power (W)	6650
	Max. DC Input Voltage (V)	580
	MPPT Range (V)	125~550
	Start-up Voltage (V)*3	150
	Nominal DC Input Voltage (V)	360
	Max. Input Current (A)	11/11
	Max. Short Current (A)	13.8/13.8
	No. of MPP Trackers	2
	No. of Strings per MPP Tracker	1
AC Output Data (On-grid)	Nominal Apparent Power Output to Utility Grid (VA)	4600
	Max. Apparent Power Output to Utility Grid (VA)	4950
	Max. Apparent Power from Utility Grid (VA)	9200
	Nominal Output Voltage (V)	230
	Nominal Output Freqency (Hz)	50/60
	Max. AC Current Output to Utility Grid (A)	21.7
	Max. AC Current from Utility Grid (A)	40
	Output Power Factor	~1(Adjustable from 0.8 leading to 0.8 lagging)
	Output THDi (@Nominal Output)	<3%
AC Output Data (Back-up)	Max. Output Apparent Power (VA)	4600
	Peak Output Apparent Power (VA)*4	6900,10sec
	Max. Output Current (A)	20
	Nominal Output Voltage (V)	230 (±2%)
	Nominal Output Freqency (Hz)	50/60 (±0.2%)
	Output THDv (@Linear Load)	<3%
Efficiency	Max. Efficiency	97.6%
	Max. Battery to Load Efficiency	94.0%
	European Efficiency	97.0%
Protection	Anti-Islanding Protection	Integrated
	PV String Input Reverse Polarity Protection	Integrated
	Insulation Resistor Detection	Integrated
	Residual Current Monitoring Unit	Integrated
	Output Over Current Protection	Integrated
	Output Short Protection	Integrated
	Output Over Voltage Protection	Integrated

HYBRID INVERTER

Technical Data			GW5048D-ES
General Data	Operating Temperature Range (°C)		-25~60
	Relative Humidity		0~95%
	Operating Altitude (m)		≤ 4000
	Cooling		Natural Convection
	Noise (dB)		<25
	User Interface		LED & APP
	Communication with BMS*5		RS485; CAN
	Communication with Meter		RS485
	Communicaiton with Portal		Wi-Fi*6
	Weight (kg)		30
	Size (Width*Height*Depth mm)		516*440*184
	Protection Degree		IP65
	Standby Self-Consumption (W)		<13
	Topology		High Frequency Isolation

*1: The actual charge and discharge current also depends on the battery.

*2: Under off-grid mode, then battery capacity should be more than 100Ah.

*3: When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V.

*4: Can be reached only if PV and battery power are enough.

*5: The standard configuration is CAN.

*6: Only compatible with 2.4Ghz network.

*: Please visit GoodWe website for the latest certificates.
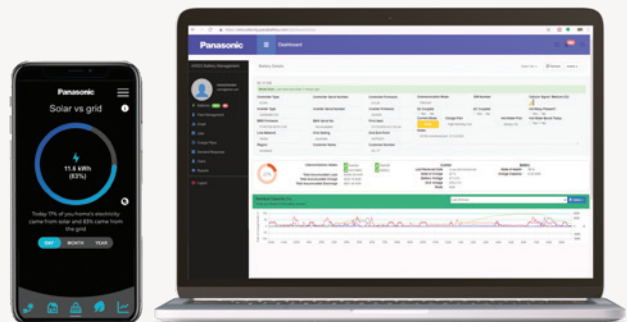
MONITORING

Panasonic ARIES is a web based application designed for customers to control and monitor Energy Storage Systems. They can view system information over the course of a day, week, month or year, without interfering with how the system is being operated.

Early Intelligent Device Failure Detection for Zero Downtime

Data Analytics for Performance Improvement and Diagnosis

Easy Management with Real Time Alerts and Reports