

## HYBRID INVERTER Aegis ES Series

### Features:

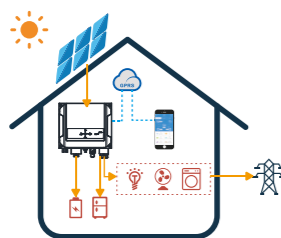
- ◆ Li-ion / Lead-acid Battery
- ◆ Operation: On-Grid (5kW) / Charging (2.5kW) / Backup(2.5kW)
- ◆ Zero Export Function
- ◆ Updating Online Remotely
- ◆ USB Updating
- ◆ Wi-Fi / GPRS / 3G / 4G
- ◆ APP for local and remote setting / monitoring



### INTRODUCTION:

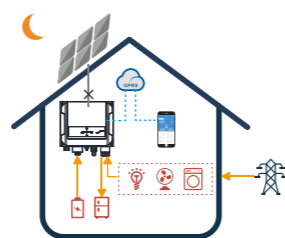
The unit is bidirectional which apply to PV system with battery to store energy. Energy produced by the PV system is used to optimize self-consumption; excess energy is used to charge the batteries, and then fed into the public grid when the PV energy is adequate, When PV energy output is in sufficient to support connected loads, the system automatically get energy from the batteries if battery capacity is abundant. If the battery capacity is insufficient to meet own consumption requirements, electricity will be drawn from the public grid

### OPERATION MODES INTRODUCTION:



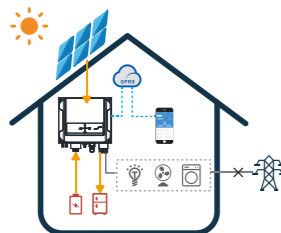
Mode I

The energy produced by the PV system is used to optimize self-consumption. The excess energy is used to recharge the batteries, then exported to grid.



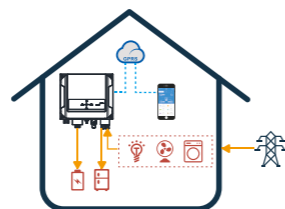
Mode II

When there is no PV, and the battery is sufficient, it can supply the load together with grid power.



Mode III

When grid fails, the system automatically switches to Back-Up mode. The Back-Up load can be supported by PV and battery.



Mode IV

Battery can be charged by grid, and charging time/power can be set flexibly on PV Master APP.

### SPECIFICATION

Specifications	Model	Aegis 3600ES	Aegis 5000ES
<b>Input Data(DC)</b>			
Max.DC Power		3800W	5400W
Max.DC Voltage		600V	
Start Voltage		100V	
DC Normal Voltage		360V	
PV Voltage Range		100V ~ 600V	
MPP Voltage Range		120V ~ 550V	
Max.input Current Per String Of Tracker A/Tracker B		11A / 11A	
Number Of Independent MPP Inputs		2	
<b>Output Data(AC)</b>			
Nominal AC Output Power		3600W	5000W
Max.AC Apparent Power		3600VA	5000VA
Max.output Current		16.4A	22.8A
AC Nominal Voltage; Range		220V /230V /240V; 180V ~280V	
AC Grid Frequency; Range		50, 60Hz; ±5Hz	
Power Factor At Rate Power		1	
Power Factor		0.9leading .....0.9leading	
THDi		< 3%	
AC Connection		Single Phase	
<b>Battery</b>			
Battery Type		Li-ion or Lead-acid	
Nominal Voltage		51.2V	
Battery Capacity		≥ 100Ah(depending requirement)	
Energy		5.0kWh	
Max.discharging / Charging Power		2500W / 2500W	
Charging Curve		3-Stage Adaptive With Maintenance	
Operating Voltage Range		44V ~ 58V	
Max.charging / Discharging Current		50A / 50A	
<b>Backup Output</b>			
Output Rate Power		2500W	
Peak Power		3450VA, 10S	
Output Voltage		230V±2%, 50Hz (60Hz Optional)±0.2%, THDv<3%(Linear Load)	
<b>Efficiency</b>			
Max.efficiency		97.00%	97.10%
Euro - eta		96.50%	96.50%
MPPT Efficiency		99.50%	99.50%
<b>Protection Devices</b>			
DC Reverse Polarity Protection		Yes	
DC Switch Rating For Each MPPT		Yes	
Output Over Current Protection		Yes	
Output Over Voltage Protection-varistor		Yes	
Ground Fault Monitoring		Yes	
Grid Monitoring		Yes	
Integrated all-pole Sensitive Leakage current		Yes	
Monitoring Unit		Yes	
<b>General Date</b>			
Dimensions (W / H / D)		495 /420 /165mm	
Weight		28kg	
Operating Temperature Range		-25...+60°C(-13...+140°F) With Derating Above 45°C(113°F)	
Noise Emission ( Typical )		≤ 25db(A)	
Altitude		Up To 2000m(6560ft) Without Power Derating	
Relative Humidity		95%	
Consumption: Operating ( Standby ) / night		< 5W / <5W	
Topology		Transformerless	
Cooling Concept		Natural	
Environmental Protection Rating		IP65	
<b>Features</b>			
DC Connection		H4 / MC4	
AC Connection		Screw Terminal	
Display		LED	
Interfaces: Wi-Fi / USB / GPRS / 3G / RS485		Yes / Yes / Opt / Opt / Opt	
Warranty: 5 Years / 10 Years / 15 Years		Yes / Opt / Opt	
Certificates And Approvals		CE, IEC 62109-1&2, VDE 0126-1-1, G83/2, AS4777&AS/NZS 3100	