

All-in-one Air-cooled Hybrid Solar ESS Cabinet

ECO-E107WS

Product Introduction

ECO_E107WS is the higher capacity PV-plus ESS solution by Elekstor /Elecnova. The ECO-E107WS benefits from the accumulated expertise in the field of ESS integration and digital monitoring technology. Adopting the all-in-one design concept, this PV-plus ESS cabinet integrates a lithium battery ESS, hybrid inverter, HVAC, FSS & BCQ to deliver a compact footprint that enables ease of installation, service and support.

The system incorporates a flexible capacity expansion capability supporting multiple operating modes including self-use, peak shaving, and backup power.



Product Features



Economic & Efficient

RTE over 90%, DOD over 95%



In-house developed

LFP280Ah battery cell system integration, leading cost advantage, 3S fusion.



Safe & Reliable

IP55, optimized ventilation design, temperature difference within 6°C



Expandable & Modular

Easy modular design supports parallel connection for convenient system expansion.



Compact & Convenient

0.96m² footprint, easy to transport and install.



Easy O&M

Support multiple ways of operation and maintenance, including onsite, cloud.



PV pluggable

Support PV connection.



Versatile

Support multiple brands of hybrid inverter

Specifications

Battery Input

| | |
|----------------|--------------------------------|
| Cell Type | LFP 280Ah, 100%DOD, 25°C, 0.5P |
| Battery System | 1P120S |
| Rated Energy | 107.52kWh |
| Rated Voltage | 384V |
| Voltage Range | 336~432V |

PV Input

| | |
|--------------------|-----------|
| PV Voltage | 150V~850V |
| MPPT | 4 |
| MAX. Input Current | 40A*4 |

AC Output

| | |
|-------------------|----------------|
| Rated Power | 50kW |
| Max. Power | 55kW |
| Nominal Voltage | 400Vac/3P+N+PE |
| Nominal Frequency | 50Hz/60 |
| THDi | < 3% |
| DC Ratio | 0.5%lpn |
| Power Factor | -0.98~0.98 |

General

| | |
|-----------------------|------------------------------------------------------------------|
| Efficiency | ≥90% |
| Charge/Discharge Rate | 0.5P |
| DoD | 95%(25+2°C) |
| Cycle Life | ≥8000 Cycles |
| Ingress Rating | IP55 |
| Cooling | Force air cooling |
| Operating Temperature | -25~55°C |
| Humidity | 0~95%RH, non-condensing |
| Altitude | ≤2000m(derating above 2,000m) |
| Dimensions(W*D*H) | 800*1200*2100mm |
| Weight | 1.2 t |
| Fire Safety | Aerosol |
| Connective | Ethernet/RS485 |
| Compliance | UN38.3, IEC62477, IEC61000, IEC62619, IEC63056, UL9540A, EN50549 |

Grid Connection Certifications

G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1 / EN 50549-10,
 VDE 0126 / UTE C 15 / VFR, 2019, NTS 631 / RD 1699 / RD 244 / UNE 206006 /
 UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116,
 IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA,
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