# Elecnova

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

# ECO-E107WS

ECO-E107WS is a professional PV-plus ESS solution provided by Elecnova through its long-term accumulation in the field of ESS integration and digital monitoring technology. Adopting the all-in-one design concept, this PV-plus ESS cabinet highly integrates equipment such as lithium battery ESS, hybrid inverter, HVAC, FSS, BCQ, etc. The product has a compact structure, easy installation, and flexible capacity expansion, supporting multiple operating modes such as self use, peak shaving, and backup power.

#### **Economic & Efficient**

RTE over 90%. DOD over 95%.

#### Safe & Reliable

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

### **Compact & Convenient**

0.96m<sup>2</sup> footprint, easy to transport and install.

### Expandable & Modular

Easy modular design supports parallel connection for convenient system expansion.

#### Versatile

Support multiple brands of hybrid inverter, with higher selectivity.



## PV pluggable

Support PV connection, with higher integration.



### Self-developed

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



#### Easy O&M

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













# Specifications

| Cell Type                      | LFP 280Ah  |           |           |
|--------------------------------|--|-----------|-----------|
| Battery System                 | 1P120S   |           |           |
| Rated Energy                   | 107.52kWh  |           |           |
| Rated Voltage                  | 384V   |           |           |
| Voltage Range                  | 336~432V   |           |           |
| PV Input                       |  |           |           |
| Recommended input power Max.   | 60kW   | 80kW      | 100kW     |
| PV Voltage                     | 150V~850V  | 150V~850V | 150V~850V |
| MPPT                           | 3  | 4         | 4         |
| MAX. Input Current             | 40A*3  | 40A*4     | 40A*4     |
| AC Output                      |  |           |           |
| Rated Power                    | 30kW   | 40kW      | 50kW      |
| Max. Power                     | 30kVA  | 40kVA     | 50kVA     |
| Nominal Voltage                | 400Vac/3P+N+PE   |           |           |
| Nominal Frequency              | 50Hz/60Hz  |           |           |
| THDi                           | < 3%   |           |           |
| DC Ratio                       | <0.5%lpn   |           |           |
| Power Factor                   | 0.8 leading~0.8 lagging  |           |           |
| General                        |  |           |           |
| Efficiency                     | ≥90%   |           |           |
| Charge/Discharge Rate          | 0.5P Max.  |           |           |
| DoD                            | 95%(25±2°C)  |           |           |
| Cycle Life                     | ≥8000 Cycles   |           |           |
| Ingress Rating                 | IP55   |           |           |
| Cooling                        | Force air colling  |           |           |
| 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, PORTARIA N° 140, DE 21 DE MARÇO DE 2022 |           |           |

