

Modular Hybrid Inverters in 50KW and 125KW per Module to build large scale Decentralised Hybrid Energy Storage Systems

The ESSM3 Series, offers a range of modular PCS units in 50 or 125KW modules allowing to reach 2.4MW in off-grid, On-grid or Hybrid configuration.

The units may be installed indoor or outdoor. For outdoor applications, the ESSM# series includes temperature isolated cabinets and their temperature controlled AC units as well as the Energy Management Software (EMS) to program and manage the system operation seamlessly.

The units are designed to operate in conjunction with utility or Generator input and may be programmed with different priorities depending on the lowest cost of energy sources. The 50KW unit has a solar PV inputs for DC coupling. The ESSM# series includes static switches in order to operate the units in off-grid, on-grid or hybrid modes automatically as programmed on the Energy Management System.

The ESSM3 Series allow for full cloud visualization of power conditions through a sophisticated cloud application.

The ESSM3[™] Inverter



- Outdoor installation (IP 65 Waterproof)
- Modules of 50KW and 125KW
- 350 to 1000 Vdc Solar input (for 50KW Module)
- Super compact
- Works with or without solar panels
- Wide Utility/Generator input voltage
- Intuitive LCD display
- Built-in AC coupled function
- Seamless Unattended operation
- Pure Sine Wave Output
- Unbalanced load support
- Up to 97.5 % efficiency
- Unity power factor
- Up to 20 Units in Parallel
- Reverse connection protection
- DC Switch
- Over Temperature Protection
- Grid Monitoring and Earth Fault protection
- DC and AC Surge Protection
- Multiple Communication Ports (RS485, CAN-BUS, Dry Contact for BMS)

The ESSM3 inverters are built in modules of 50KW and 125KW units. Each that can be connected in parallel to reach a maximum power of 1000KW (20 x 50KW) or 2400KW (20 x 125KW).

The 50KW inverter may be connected to solar panels allowing DC coupling of 50KW while the 125KW module operates as a bidirectional battery inverter.

The ESSM3 inverters are battery agnostic allowing them to be used with any type of battery (Lead Acid, ELA, Lithium, ...). The ESSM3 inverters operate modular battery units that can also be increased based on client needs. They allow the user to gradually upgrade in either power or battery size at will in order to gradually adapt the system with his growing energy needs.

The ESSM3™ Inverters exceptional design meets basic modern requirements in terms of energy efficiency and environmental friendly applications for residential, business and Industrial applications.

E24's inverters employ transformerless high-frequency technology to offer the highest efficiency while providing silent operation.

ESSM3[™] 50KW Inverter Specifications

| Product Specifications | ESSM3-50KI |
|--|--|
| PV Side | |
| Max. Input Voltage | 1000 V |
| MPPT Voltage Range | 350 V ~800 V |
| Max. Current per MPPT | 36 A |
| Number of MPPT | 3 |
| Number of Inputs Per MPPT | 2 |
| Battery Side | |
| Max. Input Voltage | 750 V |
| Min. Input Voltage | 350 V |
| DC Voltage at Nominal Operation | 500 V ~ 750 V |
| Max. DC Current | 55 A*2 |
| Max. DC Input Power | 55 kW |
| Number of DC Inputs | 2 |
| | 2 |
| AC Side (On Grid) | FOLIAN |
| Nominal AC Output Power | 50 kW |
| Max. AC Output Power | 55 kVA |
| Max. AC Current | 80 A |
| Nominal AC Voltage | 400 V |
| AC Voltage Range | 340 V ~ 440 V |
| Nominal Grid Frequency/Frequency Range | 50 / 60 Hz ±5Hz |
| THDv | < 3% (100% Load) |
| Adjustable PF Range | -1 (Lagging) ~ 1 (Leading) |
| AC Side (Off Grid) ¹⁾ | |
| Nominal AC Voltage | 230 / 400 V ±3%; 3L+N+PE |
| THDv | < 3% (Linear Load) |
| Nominal Grid Frequency/Frequency Range | 50 / 60 Hz |
| Nominal AC Output Power | 50 kW |
| Max. AC Output Power | 55 kVA |
| Efficiency | |
| Max. Efficiency | 97.5% |
| Protection | |
| Reverse Connection Protection | Yes |
| DC Switch | Yes |
| Over-Temperature Protection | Yes |
| Grid Monitoring/Earthing Fault Detection | Yes |
| Insulation Monitoring | Yes |
| DC/AC Surge Protection | DC Type II; AC Type III |
| General Parameters | ~ / / |
| Dimensions (WxHxD) | 650 x 715 x 325 mm |
| Weight | 75 kg |
| Topology | Transformerless |
| IP Protection | IP65 |
| Operation Temperature Range | -25 ~ 60°C (> 45°C Derating) |
| Operation Humidity Range | 0 ~ 100% (No Condensing) |
| | |
| Cooling Method | Intelligent Air Cooling |
| Max. Operation Altitude | 3000 m |
| Communication Port | RS-485 / CAN |
| Certificates | IEC 62477; IEC 61000; CE;GB/T; IEC 62109; IEC 61683; IEC 60068; IEC 61727; IEC 62116; EN 50549; VDE 4105; G 99 |

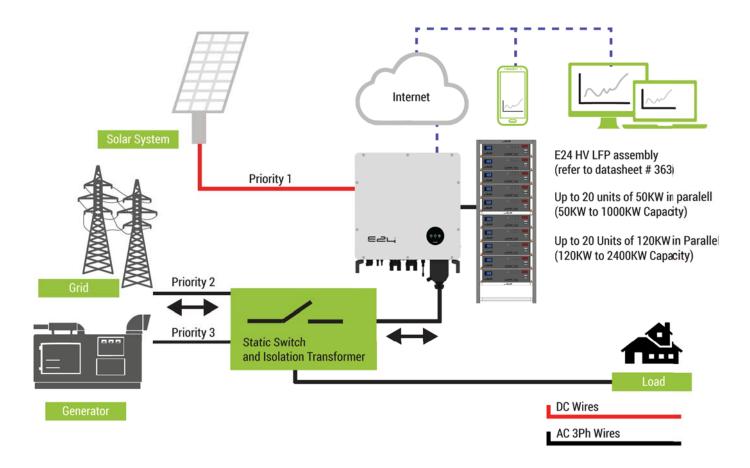


ESSM3[™] 125KW Inverter Specifications

| Product Specifications | ESSM3-125KI | |
|--|--|--|
| Battery Side | | |
| Max. Input Voltage | 1000 V | |
| Min. Input Voltage | 580 V | |
| DC Voltage at Nominal Operation | 580 V ~ 1000 V | |
| Max. DC Current | 232 A | |
| Max. DC Input Power | 134 kW | |
| Number of DC Inputs | 1 | |
| AC Side (On Grid) | | |
| Nominal AC Output Power | 120 kW | |
| Max. AC Output Power | 132 kW | |
| Max. AC Current | 191 A | |
| Nominal AC Voltage | 400 V | |
| AC Voltage Range | 400 Vac, (-15% + 10%) | |
| Nominal Grid Frequency/Frequency Range | 50 / 60 Hz ±5Hz | |
| THDv | < 1.5% (Rated Power) | |
| Adjustable PF Range | -1 ~+ 1 | |
| AC Side (Off Grid) ¹⁾ | | |
| Nominal AC Voltage | 230 / 400 V ±3%; 3L+N+PE | |
| THDv | < 1% (Resistive Load) | |
| Nominal Grid Frequency/Frequency Range | 50 / 60 Hz | |
| Nominal AC Output Power | 120 kW | |
| Max. AC Output Power | 132 kVA | |
| Efficiency | | |
| Max. Efficiency | 98.5% | |
| Protection | | |
| Reverse Connection Protection | Yes | |
| DC Switch | Yes | |
| Over-Temperature Protection | Yes | |
| Insulation Monitoring | Yes | |
| DC/AC Surge Protection | Type II(DC side); Type III(AC side) | |
| General Parameters | | |
| Dimensions(WxDxH) | 650 x 310 x 900 mm | |
| Installation | Wall Mounted / Plug in | |
| Weight | 80 kg | |
| Topology | Transformerless | |
| IP Protection | IP66 | |
| Operation Temperature Range | -40 ~ 60°C (> 45°C Derating) | |
| Operation Humidity Range | 0 ~ 100% (No Condensing) | |
| Cooling Method | Intelligent Air Cooling | |
| Max. Operation Altitude | 5000 m / (> 3000 m Derating) | |
| Communication Port | RS-485 / CAN 2.0 | |
| Standards | CE; IEC 61000; IEC 62477-1; 2012; IEC 61727; IEC 62116; GB/T 34120; GB/T 34133 | |

The ESSM3[™] Series indoor applications

The ESSM3™ Hybrid Inverter use high DC voltage requiring LFP batteries having a voltage ranging between 500 Vdc and 750 Vdc. We therefore recommend the usage of E24 pre-configured LFP battery assemblies as detailed in datasheet ref: 363.



The ESSM3 inverters may be configured to operate in off-grid, on-grid or both modes as set on the Energy Management System (EMS).

In the event where the system is designed to operate only in ongrid mode, there is no need to install the optional static switch. Under this configuration, the inverter will supply power to the load and grid as programmed under the EMS but will not be able to power the load if both utility and generator are not available.

In off-grid mode, it is necessary to connect the optional static switch and isolation transformer unit in order to allow the disconnection of the circuit between Utility/Gen and the load in order for the inverter to power the load on batteries during a power interruption. The isolation transformer provides galvanic isolation that is necessary in particular when the load is of industrial nature.

The ESSM3 inverters may be used indoor or outdoors.

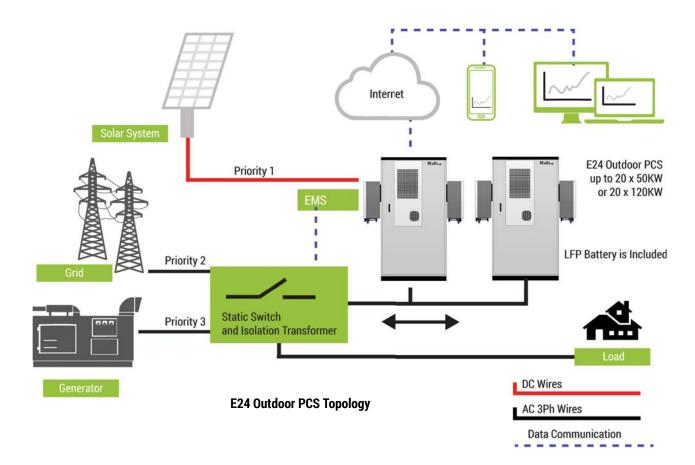
When used indoor, it is recommended to combine E24 HV LFP batteries in a manner to be compatible with the inverter DC input voltage range (refer to E24 datasheet # 363).





The ESSM3[™] Series Outdoor applications

The ESSM3™ Hybrid Inverter Series is engineered to adapt to almost multiple existing number of energy sources in a manner to optimise energy costs and minimize generator operation while offering immediate power backup to the user.



When used in an outdoor application, it is recommended to combine E24 HV LFP batteries in a manner to be compatible with the inverter DC input voltage range (refer to E24 datasheet # 363).

The 50KW inverter has 2 DC inputs allowing it to be connected to 1 or 2 battery cabinets, while the 125KW inverter has only one battery input.

ESSM3-50KI (50KW inverter) is compatible with ESSM3-BAT102 while ESSM3-120KI (125KW inverter) is compatible with either ESSM3-BAT197, ESSM3-BAT215, ESSM3-BAT233 for DC input Voltage reasons.



The ESSM3[™] Standard Outdoor Battery Cabinets



ESSM3-BAT102

Technical information:

Battery Type: LFP Battery Module Capacity (kWh): 5.12 Number of Modules: 10 x 2 Total Battery capacity (kWh): 102.4 Voltage Range (Vdc): 448 - 565 Charge / Discharge rate: 0.5C Depth of Discharge (DoD): 90% Nominal Voltage (Vdc): 512 Number of Cycles @ 80% DOD (0.5C): 8000

General Information:

Dimensions (WxDxH in mm) 1100x1100x 2380

Weight (Kg): 1500 Installation Site: Outdoors IP Protection IP54 Anti-Corrosion Level: C4 5 to 95% **Operation Humidity:** Operating Temperature (deg C): -30 to 50 Max Operation Altitude (m): 3000 Communication: Ethernet, Can Can, Modbus TCP/IP Communication protocol: Cooling Method: Air Conditioning Standards: IEC62619-2017,

UN38.3, IEC61000-6-2/4



ESSM3-BAT197

Technical information:

Battery Type: LFP Battery Module Capacity (kWh): 17.92k Number of Modules: 11 Total Battery capacity (kWh): 197 Nominal voltage (Vdc): 616-792 Charge / Discharge rate: 0.5C DoD: 90% Nominal Voltage (Vdc): 704 Number of Cycles @ 80% DOD (0.5C): 8,000

General Information:

Dimensions (WxDxH in mm) 1300x1200x 2380

Weight (Kg): 2500 Installation Site: Outdoors **IP Protection** IP54 Anti-Corrosion Level: C4 Operation Humidity: 5 to 95% Operating Temperature (deg C): -30 to 50 Max Operation Altitude (m): 3000 Communication: Ethernet, Can Communication protocol: Can, Modbus TCP/IP Cooling Method: Air Conditioning Standards: IEC62619-2017,

UN38.3, IEC61000-6-2/4



ESSM3-BAT215

Technical information:

LFP Battery Type: Battery Module Capacity (kWh): 17.92k Number of Modules: 12 Total Battery capacity (kWh): 215 Nominal voltage (Vdc): 672-864 Charge / Discharge rate: 0.5C DoD: 90% Nominal Voltage (Vdc): 768 Number of Cycles @ 80% DOD (0.5C): 8,000

General Information:

Dimensions (WxDxH in mm) 1300x1200x 2380

Weight (Kg): 2500
Installation Site: Outdoors
IP Protection IP54
Anti-Corrosion Level: C4
Operation Humidity: 5 to 95%
Operating Temperature (deg C): -30 to 50
Max Operation Altitude (m): 3000

Communication: Ethernet, Can
Communication protocol: Can, Modbus TCP/IP
Cooling Method: Air Conditioning
Standards: IEC62619-2017,

UN38.3, IEC61000-6-2/4

ESSM3-BAT233

Technical information:

Battery Type: LFP Battery Module Capacity (kWh): 17.92k Number of Modules: 13 Total Battery capacity (kWh): 233 Nominal voltage (Vdc): 728-936 Charge / Discharge rate: 0.5C DoD: 90% Nominal Voltage (Vdc): 832 Number of Cycles @ 80% DOD (0.5C): 8,000

General Information:

Dimensions (WxDxH in mm) 1300x1200x 2380

Weight (Kg): 2500 Installation Site: Outdoors IP Protection IP54 Anti-Corrosion Level: C4 5 to 95% **Operation Humidity:** Operating Temperature (deg C): -30 to 50 Max Operation Altitude (m): 3000 Communication: Ethernet, Can Communication protocol: Can, Modbus TCP/IP Cooling Method: Air Conditioning Standards: IEC62619-2017,

UN38.3, IEC61000-6-2/4





Optional Static Switches

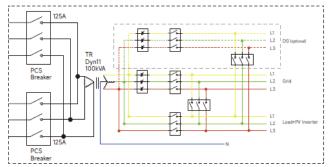
The ESSM3 inverters may be configured to operate in off-grid, on-grid or both modes as set on the Energy Management System (EMS).

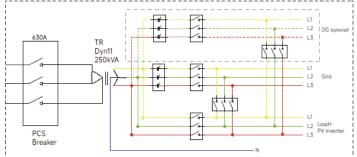
In the event where the system is designed to operate only in online mode, there is no need to install the optional static switch.

Under this configuration, the inverter will supply power to the load and grid as programmed under the EMS but will not be able to power the load if both utility and generator are not available.

In off-grid mode, it is necessary to connect the optional static switch in order to allow the disconnection of the circuit between Utility/Gen and the load in order for the inverter to power the load on batteries during power interruption.

The Static Switch also includes an isolation transformer allowing to galvanically isolate the load from the batteries. This is necessary in particular when powering industrial applications.





| Parameter | | |
|---------------------------------|------------------------|------------------------|
| Rated Voltage | 400 V | 400 V |
| Rated Current | 144 A | 360 A |
| Rated Frequency | 50 Hz | 50 Hz |
| Rated Power | 100 kVA | 250 kVA |
| Max. grid Input Power | 200 kVA | 500 kVA |
| Switch Time Between On/Off-grid | ≤ 20ms | ≤ 20 ms |
| PCS Input | 125 A*2 | 630 A |
| Max. grid Input | 400 A | 1000 A |
| DG Input(Optionsl) | 400 A | 1000 A |
| Load Breaker | 400 A | 1000 A |
| Grid/DG Bypass Breaker | 200 A*2 | 630 A*2 |
| Isolation Transformer | 100 kVA | 250 kVA |
| Lightning Protection | Type II | Type II |
| Protection Degree | IP54 | IP54 |
| Relative Humidity | 0 ~ 100% | 0 ~ 100% |
| Operating Temperature | -25°C ~+ 45°C | -25°C ~+ 45°C |
| Cooling Type | Air Cooling | Air Cooling |
| Dimension(WxDxH) | 1170 x 2380 x 1105 mm | 900 x 2380 x 930 mm |
| Weight | 791 kg | 1250 kg |
| Operating Altitude | ≤ 3000 m | ≤ 3000 m |
| Communication | RS-485 / 4G / Ethernet | RS-485 / 4G / Ethernet |
| Installation | Tower - type | Tower - type |



Second Level EMS Communication Box



- Dual Power Source (220Vac and 24Vdc)
- Supports remote Monitoring (Wifi/4G and local monitoring via web page)
- IP65 outdoor design

A second level energy management system (EMS), also known as a two-layer or dual-layer EMS, is a hierarchical system used to optimise energy consumption and distribution, particularly in complex energy systems like microgrids, multi-microgrid systems, and industrial settings. These systems typically involve a supervisory or higher-level layer that makes strategic decisions based on long-term objectives, and a lower-level layer that executes those decisions in real-time.

Here's a breakdown of how these systems work:

1. Higher-Level (Supervisory) Layer:

Long-term planning and optimization: This layer focuses on optimising energy usage over a longer time horizon (e.g., dayahead, week-ahead).

Strategic decision-making: It makes decisions about energy procurement, generation, storage, and distribution based on factors like energy prices, weather forecasts, and user demands.

Example applications: Determining optimal energy generation from renewable sources, setting retail electricity prices in multimicro-grid systems, or configuring the capacity of energy storage systems.

2. Lower-Level (Real-time) Layer:

Fast execution and control: This layer focuses on the real-time implementation of the higher-level plan, adjusting energy flow and consumption to match the strategic decisions.

Dynamic response: It ensures the system responds quickly to changes in demand, supply, and other factors.

Examples: Power converters (DC-DC converters, inverters) distributing power among different components of a microgrid, or controlling the charging/discharging of energy storage systems.

Benefits of a Two-Layer EMS:

Improved efficiency: By optimizing energy usage over longer timeframes and responding dynamically to real-time conditions, two-layer EMS can significantly improve overall energy efficiency.

Cost savings: Optimizing energy procurement and distribution can lead to reduced energy costs.

Increased reliability: The ability to respond to unexpected events and maintain power balance can enhance the reliability of the energy system.

Flexibility and scalability: Two-layer EMS can be adapted to various system sizes and complexities, from microgrids to large industrial facilities.

Integration of renewables: They can effectively integrate intermittent renewable energy sources like solar and wind power by optimising their output and energy storage.

Examples of Applications:

Micro-grids: Managing energy generation, storage, and consumption within a localized grid, often integrating renewable energy sources.

Multi-microgrid systems: Coordinating energy sharing and trading between multiple interconnected micro-grids.

Industrial settings: Optimising energy consumption in manufacturing and production facilities, reducing energy-intensive operations.

Community Energy Management Systems (CEMS): Coordinating energy usage across a community, often involving demand response and energy sharing.

In essence, a two-layer EMS provides a structured and effective approach to managing complex energy systems, enabling greater efficiency, cost savings, and reliability.

Second Level EMS Specifications

| MODEL | ESSM3-EMS2 |
|---|--|
| Southbound Communication | |
| Southbound EMS Communication Method | Ethernet (Electrical) |
| Max. number of Southbound EMS | 20 |
| Max. distance of Southbound Communication | 100 m |
| Ethernet Port Parameter | 10 / 100 Mbps Adaptive |
| Northbound Communication | |
| Northbound Communication Method(Default) | Ethernet (Electrical / Optical Fiber) |
| Northbound Communication Method(Optional) | WLAN / 4G |
| Local Display | Embedded Web |
| Indicator Lights | Power, Running, Fault+Ethernet Status Indicators |
| Port Parameters | |
| Number of RS485 Interfaces | 7 |
| USB Interface | 1 with USB2.0 |
| SD Interface | 1 |
| Digital Input Detection Interface | 8 |
| Digital Output Control Interface | 4, NO+NC |
| Indicator Lights | Power, Running, Fault + Ethernet Status Indicators |
| Environmental Parameters | |
| Operating Temperature Range | -30°C - + 55°C |
| Storage Temperature Range | -40°C - + 70°C |
| Operating Relative Humidity | 5% ~ 95% (No condensation) |
| Electrical Parameters | |
| Power Supply | DC / AC Redundant Power Supply |
| AC power Supply Voltage Range | 85 - 264 VAC |
| DC power Supply Voltage Range | 13 - 36 VDC |
| Standby Power Consumption | < 20 W |
| Mechanical Parameters | |
| O&M Method | Front Panel Access |
| Dimensions(WxDxH) | 560 x 300mm x 600 mm |
| Weight | 34 kg |
| IP Degree | IP65 |
| Installation Method | Wall / Bracket / Floor Mounted |



Power Control Box



- Maximum number of inverter up to 80
- Maximum distance of inverter communication up to 1000m
- Upload the real-time operating data to local monitoring or cloud server Supports multiple communication modes

The power monitoring box, is designed to track and manage electrical power generation and consumption, ensuring the monitoring of individual inverters as well as providing an accurate measurement of all energy parameters of the main power bus.

Energy Consumption Management: Tracks power usage, helping users understand where energy is being consumed and identify potential areas for energy savings,

Power Quality Monitoring: Monitors voltage, current, and other electrical parameters for fluctuations and anomalies, ensuring stable and reliable power delivery.

Data Logging and Analysis: Records historical power data, allowing for analysis to optimise system performance and predict future needs.

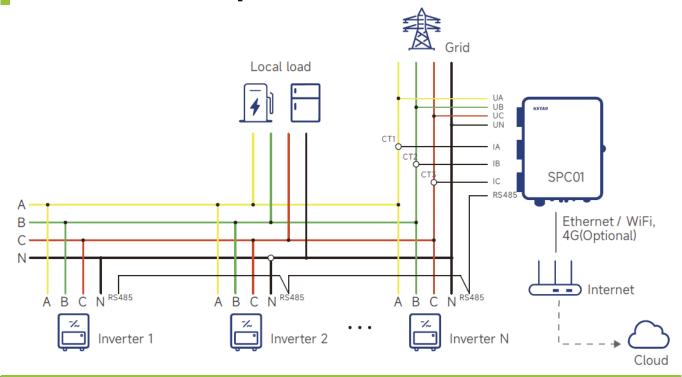
Safety and Protection: Detects potential hazards like overloads, short circuits, and voltage surges, triggering alerts or protective actions to prevent damage or accidents.

Remote Monitoring and Control: Supports remote access through web interfaces or mobile applications, enabling users to monitor and control the system from anywhere.

Alarm and Notification Systems: Provides alerts for abnormal power conditions, allowing for timely intervention and preventing potential problems.

Integration with other systems: Can be integrated with building management systems or other IoT platforms for comprehensive control and automation.

Connection and Specifications



| Technical Specifications | ESSM3-PCB |
|---|---------------------------------|
| Input | |
| Rated Input Voltage | 230 VAC (L-N) / 400 VAC (L-L) |
| Input Voltage Range | 173 - 480 VAC |
| Gird Connection Type | 3W + N + PE |
| Rated Input Frequency | 50 / 60 Hz |
| Input Frequency Range | 45 - 65 Hz |
| Lightning Protection Grade | Grade C |
| Communication | |
| Inverter Communication | RS-485*4 |
| Max. number of Inverter | 80 |
| Max. distance of Inverter Communication | 1000 m |
| Communication | Ethernet / WiFi / 4G (Optional) |
| НМІ | Bluetooth + Indicator Light |
| Function | |
| Communication Failure Shutdown | Yes |
| Remote Update | Yes |
| Zero Export | Yes |
| Zero-export Response Time | 2s |
| Zero-export Control Accuracy | 3% |
| Mechanical Parameter | |
| Dimensions(WxDxH) | 420 × 132 × 320 mm |
| Weight | 4 kg |
| Operation Temperature Range | -25 - + 60°C |
| Cooling Type | Natural Convection |
| Max. Operation Altitude | 3000 m |
| Operation Humidity | 0 - 100% (No Condensation) |
| IP Class | IP65 |
| Installation | Wall / Rack Mounted |
| | 15 |



Wifi Module

The Wifi module allows the connection of inverters to the logger or the connection of the logger(s) to a central monitoring station

| T 1 1 10 15 11 | FOOLIA DOD |
|---|---------------------------------|
| Technical Specifications | ESSM3-PCB |
| Input | |
| Rated Input Voltage | 230 VAC (L-N) / 400 VAC (L-L) |
| Input Voltage Range | 173 - 480 VAC |
| Gird Connection Type | 3W + N + PE |
| Rated Input Frequency | 50 / 60 Hz |
| Input Frequency Range | 45 - 65 Hz |
| Lightning Protection Grade | Grade C |
| Communication | |
| Inverter Communication | RS-485*4 |
| Max. number of Inverter | 80 |
| Max. distance of Inverter Communication | 1000 m |
| Communication | Ethernet / WiFi / 4G (Optional) |
| НМІ | Bluetooth + Indicator Light |
| Function | |
| Communication Failure Shutdown | Yes |
| Remote Update | Yes |
| Zero Export | Yes |
| Zero-export Response Time | 2s |
| Zero-export Control Accuracy | 3% |
| Mechanical Parameter | |
| Dimensions(WxDxH) | 420 × 132 × 320 mm |
| Weight | 4 kg |
| Operation Temperature Range | -25 - + 60°C |
| Cooling Type | Natural Convection |
| Max. Operation Altitude | 3000 m |
| Operation Humidity | 0 - 100% (No Condensation) |
| IP Class | IP65 |
| Installation | Wall / Rack Mounted |
| | |



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"E24's technology thrives on optimization, automation, and advanced data monitoring"

Advanced Energy Management Systems, Software, IOT & Web Monitoring Technology

"That which is measured improves. That which is measured and reported improves exponentially."

- Karl Pearson

E24 Technology is all about optimization and automation allowing customers to save energy, save on the environment and improve quality of life.

At E24, advanced software is at the heart of each solution provided allowing to simplify operations while optimizing return on investment.

All solutions are software customized to best fit their working environment and the energy conditions and tariffs under which they are operated. Each customer, each application, and each region is different. This is why E24 software is designed to be easily configured upon commissioning to adapt perfectly to the application, customer requirements and load profile.

E24 offers IOT and Web monitoring services allowing customers to monitor all data related to their energy infrastructure. This includes equipment that may or may not be part of E24 provided solutions. E24 Software can, of course, be configured to notify customers of any anomaly or threshold reached for his needed actions.

Depending on the solutions purchased E24 offers adapted standard and custom designed IOT and Web Monitoring services that allow customers to monitor all data related to their energy infrastructure and see historical information dating up to 10 years.

E24 IOT & Web Monitoring Solutions

Cloud Monitoring add-ons allow customers to visualise all data related to their energy infrastructure from their PC, laptop or smartphone. Customers are also able to download their data dating back up to 10 years for their analysis.

IOT Solutions allow customers to view their data through a userfriendly interface, and accordingly take actions such as starting or stopping certain equipment, modifying settings or other actions, all done remotely from any internet device.

Customising Services allow E24 to modify its software to best suit customers' existing energy infrastructure. This may include setting-up communication links with SCADA systems or any bidirectional exchange of information.





Hybrid

Storage Inverter

Battery







and much more ...

E24 Modular Range Of Products For Building Easy, Flexible & Evolutive Solutions

E24 products dynamically evolve with the lifestyle and work style of its customers while easing the installation process.

E24 products are conceived in modules allowing for an easy upgrade to adjust with the needs of the customers. Being modular and easy to connect E24 products allow installers to easily configure the required modules for an optimal solution while offering easy upgrade options.



Ordering Information

| Ref. Number | Description |
|-----------------|--|
| ESSM3-50KI | IP65 Bidirectional Inverter with PV input, 50KW, 3Phase, 350-750Vdc, 400/230V, 50/60Hz |
| ESSM3-125KI | IP65 Bidirectional Inverter with PV input, 125KW, 3Phase, 350-750Vdc, 400/230V, 50/60Hz |
| ESSM3-BAT102 | IP 54 Outdoor LFP Battery, 102.4KWh with EMS, Cooling, communication but without Static Switch |
| ESSM3-BAT197 | IP 54 Outdoor LFP Battery, 197KWh with EMS, Cooling, communication but without Static Switch |
| ESSM3-BAT215 | IP 54 Outdoor LFP Battery, 215KWh with EMS, Cooling, communication but without Static Switch |
| ESSM3-BAT233 | IP 54 Outdoor LFP Battery, 233KWh with EMS, Cooling, communication but without Static Switch |
| ESSM3-STS-100KI | STS unit for 2 x 50KW inverters in off-grid mode |
| ESSM3-STS-250KI | STS unit for 5 x 50KW Inverters in off-grid mode |
| ESSM3-EMS2 | 2nd Level EMS for on-Grid parallel application for ESSM3 systems |
| ESSM3-PCB | Power Control Box |
| ESSM3-WIFI | Stick Wifi Logger |
| ESSM3-ACM | 3 Phase AC Meter without CTs |
| ESSM3-CK1 | Connecting Kit for 1 x ESSM3-50KI and ESSM3-BAT102 |
| ESSM3-CK2 | Connecting Kit for 1 x ESSM3-50KI and 1 x ESSM3-BAT197 |
| ESSM3-CK3 | Connecting Kit for ESSM3-50KI with an Additional Battery Cabinet |











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