

BSI 90/218



FEATURES:

- Preconfigured battery storage kit for indoor use
- Battery inverter and energy management system (EMS) perfectly harmonised by in-house development
- Modular battery and combiner racks for simple capacity and power expansion
- Comprehensive EMS with peak shaving, self-consumption optimisation, time-of-use and much more integrated into the system at the factory
- Maximum security with state-of-the-art software architecture (GDPR-compliant)
- High accessibility for user-friendly maintenance (max. once a year)
- 10-year performance warranty with a wide temperature range

General technical data

| | | |
|-----------------------------|------|--------------------|
| Rated apparent power | kVA | 90 |
| Rated voltage | Vac | 400 |
| Frequency | Hz | 50 |
| Maximum AC current | A | 130 |
| Battery cell | Type | Li-Ion (LFP) Pouch |
| Total capacity | kWh | 218 |
| Rated net capacity (90%DoD) | kWh | 196 |



Inverter

| | | |
|--------------------------------------|-----|---------------|
| Quantity | n. | 1 |
| Rated apparent power | kVA | 90 |
| Maximum AC current | A | 130 |
| Power factor / Range | | 1 / 0i ... 0c |
| Peak current (Ip) | A | 320 |
| Initial short circuit current (Ik'') | A | 130 |



Battery

| | | |
|----------------------------|------|--------------------|
| Quantity of module | n. | 46 |
| Module capacity | kWh | 4.74 |
| Rated Voltage | V | 736 |
| Max. C-rate | | 1C |
| Battery cell | Type | Li-Ion (LFP) Pouch |
| Cycles @ 90% DoD 65% SoH | n. | 7300 |

Technical data - Energy Management System

| | | |
|--|-----|----|
| Voltage supply | VDC | 24 |
| RJ45 dedicated MAC addresses for OT/IT use | n. | 2 |
| Encrypted MQTTS communication | | ✓ |
| Digital cloud twin | | ✓ |
| 2-factor authentication | | ✓ |
| Communication Interface Ethernet (Modbus TCP/IP / local and cloud-to-cloud REST API) | | ✓ |

• Possible Applications

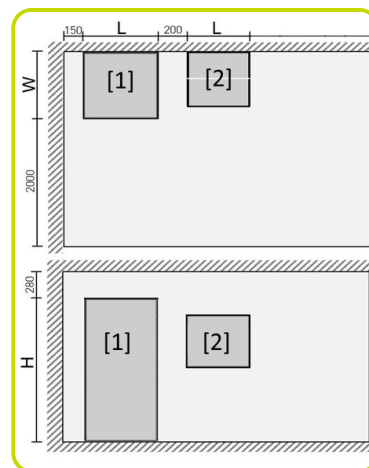
| | |
|--|---|
| Self-consumption optimization (SCO) | ✓ |
| Peak shaving (PS) | ✓ |
| Time-based charging/discharging (ToU) | ✓ |
| Combined operation (multi-use e.g. PS and SCO) | ✓ |
| Energy trading | ✓ |
| Simple management of charging stations | ✓ |
| Load management and prioritisation for charging points | ✓ |
| Integration of Plant controllers | ✓ |

Installation data

| | | |
|--|------------|-------------------------|
| AC-Grid connection | | 3P, PE / TT, TN-C, TN-S |
| AC-Auxiliary grid connection | | 1P, N, PE / TN-C-S |
| Communication Interfaces RJ45 (Ethernet) | | ✓ |
| [1] Battery Rack | (L/W/H) mm | 815x696x2130 |
| CombinerRack | (L/W/H) mm | 800x800x2200 |
| [2] Inverter | (L/W/H) mm | 673x626x621 |
| Weight Battery Rack | kg | 1250 |
| Weight ConnectionBox | kg | 25 |
| Weight Inverter | kg | 69 |
| Protection rating Battery Rack | IP | 20 |
| Protection rating Inverter | IP | 65 |
| Max. permissible installation height | m | 2000 |
| Operating temperature range | °C | 10-40 |
| Product warranty | Years | 5 |
| Performance warranty | Years | 10 |

Safety devices

| | |
|---|---|
| Permanent monitoring of the battery cells | ✓ |
|---|---|



ETOP
creat să reziste

Republica Moldova, MD-2023
mun. Chișinău, str. Uzinelor 90
+ /373/ 67 707 707
office@etop.md
www.etop.md

Certificates / Approvals

Battery Rack

Modul:

UN38.3 / UL 9540A

Rack:

CE / IEC 62619 / IEC 63056 / UL 1973 / VDE 2510 50 / EN 61000-6-2 / EN 61000-6-4

Battery Inverter

EU- Directives:

2014/30/EU / 2014/35/EU / 2011/65/EU / 2015/863/EU

Safety Battery Inverter:

IEC 62109-1 / IEC 62109-2 / IEC 62116 / IEC 61727 / IEC 62477-1 / IEC 61439-1 / IEC 61439-2

EMC:

EN 61000-6-2 / EN 61000-6-4 / EN 61000-3-12 / EN 61000-3-11

Grid codes: DIN VDE V 0126-1-1 / VDE AR-N 4105:2018 / VDE AR-N 4110:2023 / C10/C11 / G99/1-9 / TOR Stromezeugungsanlagen Typ A/B / CEI 0-16, CEI 0-21 / EN 50549-1/-2 / AS4777.2 / NTS 631, UNE 27002

For other grid codes please contact your local sales representative



Optional features

- Optional Router •
- Optional Energy Meter Ethernet •
- Optional Energy Meter RS485 •
- CombinerRack Single / Dual •
- Extension Kit 109 •
- Upgrade Kit CombinerRack •



ETOP
creat să reziste

Republica Moldova, MD-2023
mun. Chişinău, str. Uzinelor 90
+ /373/ 67 707 707
office@etop.md
www.etop.md