Technical datasheet

Battery generator BUTLER S 50/25



- Developed in Switzerland to cater to the unique demands of industry and commerce. The BUTLER, based on Li-ion cell technology and Swiss engineering, has been extensively tested in the field.
- Customers and service employees are supported by a "digital twin" cloud-based application which enables status-based notifications.
- Whether for indoor or outdoor use, the BUTLER offers the ideal solution for mobile or temporary stationary power applications.

Benefits at a glance	
	Off-grid electricity transport Ideal for remote operations like tunnel refurbishments and film production.
	Boost weak grid connections Enables heavy equipment to run on household plugs, solving peak power constraints.
	Hybrid system Fuel savings and downsizing existing generator fleet for the same applications. Extends the service life of generators, especially for Stage V generators.
	Flexible and multi-use Reduces operational obstacles like the need for local authorizations and on-site electricians.
	Scale capacity and power quickly Stackable units maximize utilization and reduce ownership costs.

emost AG
Hagackerstrasse 9
8953 Dietikon - Switzerland

www.emost.com
sales@emost.com

Technical data

Battery system – Basic configuration	
Weight	660 kg (without trailer)
Dimensions (L x B x H)	148 x 82 x 110 cm
Protection class	IP54
Operating range	-20°C to +40°C ambient temperature
Cooling principle	Air cooled
Lithium-ion-battery	Lithium Mangan Oxid (LMO)
Noice	<52 dB (at a distance of 1m)
Charging	1 x CEE32A plug 400 V 1 x CEE16A plug 400 V
Discharging/Feed-out	1 x CEE32A socket 400 V 1 x CEE16A socket 400 V 1 x Typ 25 (CH) **or** 1 x CEE 7/3 (EU) socket (Schuko Typ F)
Operating modes	➢ Off-grid operation with black start capability (stand-alone operation) ➢ Mains operation with UPS functionality (uninterruptible power supply) ➢ Power boost of a lower mains power connection (boost mode) ➢ Hybrid mode with automatic generator start function

Electrical parameter		
Frequency	50 Hz	
Nominal power	50 kVA (45 kW)	
Overload capacity	**100 – 110%**	continuously (30 min; @23°C)
	110 – 125%	max. 10 min
	125 – 150%	max. 1 min
	> 150%	max. 0.2 sec
Charging time (full charge)	<4.5 h (5% to 95% @ max. 16 A charging power; above 0°C)	
Battery capacity	25 kWh net useable at 23°C[1]	
Protection	The system does not require external grounding.[2]	

[1] Butler units can be connected in series to increase capacity.
[2] Detailed information in the operating manual must be observed.

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Optional Features	
Additional sockets for discharging	Home-Charging (230 V) Single-phase charging (type 13 plug)
Additional plugs for charging	➢ 1 x Type 25 (CH) **or** 1 x CEEE 7/3 (EU) (Schuko Typ F) ➢ 1 x CEE16A socket 400V or 1 x CEE63A socket 400V[3]
Alternative design	Corporate design on request available
Generator start	Steering of a hybrid system with a generator start/stop automation.
Crane mode	Solving crane-specific electrical specialities, RCD with extended frequency range, adapted insulation monitoring for cranes, addressing problems with higher residual currents.
Accessories: **LINK duo**	Combines 2 Butler S system; 2*CEE63A to 1*CEE125A

Transportation
The transport of the battery system is in accordance with UN 3536, categorized as "LITHIUM BATTERIES INSTALLED IN GOODS CARRIER UNITS." Given that the battery weight is <333kg (battery mass), it qualifies under the 1000 points rule as per 1.1.3.6 of the ADR. This regulation permits the transportation of dangerous goods in small quantities without the requirement special signs for warning signs and no tunnel restrictions.

Telemetrie	
Mobile communication	LTE Cat 1 (EU) 2G/3G Fallback
Navigation	72 channels GPS, Galileo, GLONASS, BeiDou

Butler Trailer (optional)	
Trailer	With a special tray to accommodate the battery system.
Supplementary kits	Fire extinguisher holder incl. fire extinguisher Storage box.
Loading & unloading	Fast and safe handling thanks to special fastening technology greatly facilitates transport - no tension straps required.
Permissible speed	Max. 100 km/h (country-specific regulations must be complied with)
Coupling options	Ball head
Dead weight	+270 kg

[3] We are happy to validate customer requirements in advance of an order. The 63 A power supply variant is suitable for frequency-controlled applications and selective other applications (e.g. cranes)

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IT Services – emost Insights (IoT Platform)	
Basic package[4] Annual subscription per unit	
Monitoring	Real-time location monitoring of the unit as well as battery charging status and access to selected operational parameters.
Unit health	Error messages and warnings in the event of critical events and instructions for optimising battery life. Notification by email.
Notification system	Consistent delivery of comprehensive updates and information (e.g. SoC push).
Device and user access management	Management of devices and users who have access to emost Connect.
Operator access	A guest user can request operator access. The request is processed and, if necessary, authorised by the owner or, if there is no owner, by the service partner. A user has time-limited access to certain units.
Reporting	Create operating reports including battery hours and consumption within the EMOST APP.
Remote control	Remote fine adjustment of the operating parameters according to the respective use case (e.g. input current limitation)

All technical data and descriptions correspond to the state of knowledge at the time of printing and are for informational purposes only. emost BUTLER systems and their accessories are subject to constant further development. Technical specifications and illustrations are non-binding. Liability for misprints and mistakes is excluded.

[4] The basic package includes a two-year subscription to our IoT platform.