

Technical datasheet

Battery generator BUTLER M 100/150



- 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 are supported by a "digital twin" cloud-based application which enables status-based notifications for operations and service.
- 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.

Technical data

Battery system - basic configuration	
Weight	2'850 kg (without trailer) 3'370 kg (with trailer)
Dimensions (L x B x H)	250 x 112 x 170 cm (without trailer)
Protection class	IP54
Operating range	-20°C to +50°C ambient temperature
Cooling principle	Air cooled
Lithium-Ion-Battery	Lithium Nickel Mangan Cobalt Oxid (NMC)
Charging	1 x CEE63A plug 400 V 1 x CEE32A plug 400 V
Discharging / feed-out	1 x CEE16A socket 400 V 1 x CEE32A socket 400 V 1 x CEE63A socket 400 V
Operating modes	<ul style="list-style-type: none"> ➤ 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 parameters									
Frequency	50 Hz								
Nominal power	100 kVA (90 kW)								
Overload capacity	<table style="border: none; width: 100%;"> <tr> <td style="width: 150px;">100 - 110%</td> <td>continuously (30 min; @23°C)</td> </tr> <tr> <td>110 - 125%</td> <td>max. 10 min</td> </tr> <tr> <td>125 - 150%</td> <td>max. 1 min</td> </tr> <tr> <td>> 150%</td> <td>max. 0.2 sec</td> </tr> </table>	100 - 110%	continuously (30 min; @23°C)	110 - 125%	max. 10 min	125 - 150%	max. 1 min	> 150%	max. 0.2 sec
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110 - 125%	max. 10 min								
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> 150%	max. 0.2 sec								
Charging time (full charge)	< 4.5 h from 5% to 95% (@ max. 63 A charging current); above 0°C								
Battery capacity	150 kWh net usable (185 kWh installed); @23°C ¹								
Protection	The ECO Version of the system requires external grounding ² Inside isolation monitoring is available as an option.								

¹ Butler units can be connected in series to increase capacity.

² Detailed information in the operating manual must be respected -

Optional features	
Additional sockets for discharging Configuration as per client request	<ul style="list-style-type: none"> ➤ 2 x Type 25 (CH) or 2 x CEEE 7/3 (EU) (Schuko Typ F) ➤ 1 x CEE16A socket 400V ➤ 1 x CEE32A socket 400V ➤ 1 x CEE125A socket 400V ➤ Power Lock, 3ph, N, PE
Additional plugs for charging	<ul style="list-style-type: none"> ➤ 1 x CEE16A plug 230V or CEE63A plug 230V ➤ 1 x CEE16A plug 400V ➤ 1 x CCS-Type 2 plug
Additional power module	Incl. increase of nominal power to 150 kVA (135 kW)
Alternative design	Corporate design on request available
Generator start	Steering of a hybrid system with a generator start/stop automation.
Isolation monitoring	Internal insulation monitoring on each output socket. In the event of a fault, only the affected sockets are switched off.
Accessories: LINK Duo power-lock	Combines 2 Butler M systems; 2*Power-Lock to 1*Power-Lock

Transport
The transport is subject to the AdR regulation UN3536. The transport unit must be marked accordingly. The driver must be in possession of a valid AdR certificate.

Telemetry	
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	+520 kg

IT Services – emost Insights (IoT Platform)	
Basic package ³ 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)
Guardian mode	Integration into your Piket measures, e.g. to detect grid failures, generator faults or malfunctions in the battery storage system; notification by SMS and email

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.

³ The basic package includes a two-year subscription to our IoT platform.