

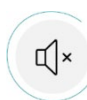




Technical Datasheet

Battery Storage BUTLER S 100/50



- Developed in Switzerland to cater to the unique demands of industry and commerce. The BUTLER S 100/50, based on Li-ion cell technology and Swiss engineering, has been extensively tested in practice with the smaller Butler S 50/25.
- Customers and service employees are supported by a "digital twin" which enables status based notifications.
- Whether indoors, outdoors, for stand-alone operation or as a booster in combination with the power grid - the BUTLER S 100/50 is the optimal solution for your mobile power applications.

Benefits at a glance	
	Economic: Better price/performance ratio of life cycle costs compared with diesel generators or complex and provisional grid connections. Investment security due to ecological advantage.
	Ecological: Meets all relevant standards - now and in a CO2-free world. Emission-free, also suitable for use in enclosed spaces and tunnels.
	No noise emission: Increases comfort and work safety. Enables use in demanding situations such as night-time construction sites and events.
	High power quality: Allows the use of sensitive equipment (noise-free sinusoidal waveform, always within the specified voltage and frequency tolerances) without oversizing the generator and with significantly higher efficiency than diesel generators.
	Easy to use: Enables permit-free and simple installation for rapid mobilization, easy transport and simple operation with CE conformity.

Technical Data

Battery system - Basic configuration	
Weight	< 1'000 kg (excl. trailer) < 1'300 kg (with trailer)
Dimensions (L x W x H)	180 x 112 x 112 cm (excl. Trailer)
Protection Class	IP54
Operating range	-20 0C bis +50°C ambient temperature
Cooling principle	industrielles Klimagerät
Lithium-ion batteries	Lithium Nickel Mangan Cobalt Oxid (NMC)
Charging	1 x 3ph CEE plug, 400 V, 32 A 1 x 3ph CEE plug, 400 V, 16 A 1 x 1ph CEE plug, 230V, 10 A
Discharging/Feed-Out	1 x 3ph Typ25 16 A 1 x 3ph CEE 16 A 1 x 3ph CEE 32 A 1 x 3ph CEE 63 A
Operating Modes	<ul style="list-style-type: none"> ➤ Off-grid operation with black start capability (island mode) ➤ Mains operation with UPS functionality (uninterruptible power supply) ➤ Power boost of a weak mains connection

Electrical parameters	
Frequency	50 Hz
Nominal power	100 kVA (90 kW)
Charging time (full-time)	4.5 h (max. 24 A charging current)
Battery capacity	45 kWh net usable (55 kWh installed)
Protection	The system does not require external grounding.

Optionale Features	
Additional sockets for discharging configuration as per client request	<ul style="list-style-type: none"> ➤ 1 x 3ph CEE 125 A ➤ Change type 25 to Schuko 1ph 10 ➤ 1 x CSS type 2 plug for charging at EV charging station
Alternative design	Corporate design on request available
Generator start	Steering of a hybrid system with a generator start/stop automation

Transport	
The battery system is transported under UN 3536 "LITHIUM BATTERIES INSTALLED IN GOODS CARRIER UNITS". The battery cell weight is <333kg (battery mass) and falls under the 1000 points rule according to 1.1.3.6 of the AdR. This AdR regulation allows the transportation of dangerous goods in small quantities without the need for warning signs.	

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 (applicable to Switzerland)
Coupling options	Ball head or jaw hitch
Dead weight	+300 kg

IT Services – emost Insights (IoT Platform)	
Basis package ¹ Annual subscription	
Monitoring	Realtime location monitoring Charging battery status Access to selected operational information
„Unit Health“	Notification of critical events (error messages and warning alerts) such as imminent deep discharge Alert notifications received by email
Notification system	Consistent delivery of comprehensive updates and information (e.g. SoC push)
Device and User Access Management	Streamlined control and oversight of devices, ensuring secure and efficient management of user access privileges who have access to emost Connect.
Operator access	Effortless Access Management: Enables time-limited activation of information and notifications tailored for operational employees, ensuring streamlined communication and efficient workflow facilitation.

All technical data and descriptions correspond to the state of knowledge at the time of printing and are for information 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.

¹ The basic package encompasses a two-year subscription to our inclusive IoT platform.