

B12-033.1

Buffer Module for SMT Systems for Bridging Voltage Interruptions

The module is used to be able to continue measuring during any interruption to the on-board supply system. Furthermore, it enables measurement tests if the on-board supply system is not to be further burdened by the measurement technology.



Universal

The total capacity available can be increased by the simultaneous use of several modules. It is also possible to operate the B12-033.1 together with other, external energy sources. For example external testing batteries can be connected in mobile applications or a separate network supply can be connected to save the backup supply when the vehicle is being serviced. And last, but not least, the buffer module can also be used as an independent energy store – when separate from SMT.

Safe

The lithium iron phosphate cells used guarantee high intrinsic safety of the accumulator. This is supplemented by comprehensive fail-safe battery management functions. This provides reliable protection against deep discharging, overcharging, overheating and shorts.

User-Friendly

The buffer module can be charged both within an SMT system and by applying an external charging voltage. The visual charge state display indicates the operational readiness of the module at all times – even when a system is powered off or with non-integrated modules.

Areas of Application

- Buffering during interruptions to the measuring device supply (e.g. during extreme cold starts)
- Measurement tests without burdening the on-board supply system

Advantages

- Integrated buffer solution for SMT (no additional parts)
- Monitoring of charge state by the measurement system
- User-specific system behavior according to remaining runtime (e.g. issuing warnings, ending measuring, ...)
- Usage always possible at short notice thanks to fast charging capability
- Usage possible as mobile energy store when without SMT



Technical Data

Accumulator	
Nominal voltage	13.2 V
Capacity	2.5 Ah / 33 Wh (at 20 °C)
Technology	LiFePo4
Charge current	1 C, with internal system charging 2 C, with fast charging via Power Input
Charge state display	Yes
Deep-discharging protection	Yes
Overcharging protection	Yes

Power Input	Standard operation	Fast charging
Input voltage	10 V ... 18 V	24 V ±10 %
Input current	Dep. on charge current	≤3 A
Overvoltage protection	≥28 V	≥28 V
Inverse-polarity protection	≤-28 V	≤-28 V

Power Output	
Output current	≥25 A
Short-circuit withstand	30 A (fuse)

Environmental Conditions	
Storage	-30 °C ... +85 °C, 10 % ... 90 % rel. humidity, non-condensing
Operation	-20 °C ... +50 °C (standby, discharging) or 0 °C ... +50 °C (charging), 10 % ... 90 % rel. humidity, non-condensing

Order Numbers

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