

The lithium iron phosphate (LiFePO4) battery systems are the modern basis for a professional power supply. They have outstanding properties such as very high charging and discharging currents with very good voltage

● **Short charging times due to charging currents up to 1C**

Charging can be carried out with a normal GEL/AGM battery charger and adapted characteristic curve under 0 °C. At lower temperatures, charging may only be carried out with a maximum of 0.1 C.

● **Maximum power during total discharge**

The high current output capability of 1C - 3C continuously and briefly up to 10C provides the maximum power until complete discharge (no "voltage or capacity drop" as with lead-acid batteries) and makes the application with high current consumers and chargers, as is the case with e.g. combi inverters, very interesting.

stability, which make a powerful and safe system possible. The service life is considerably longer compared to conventional lead batteries.

● **Very low self-discharge < 3 % per month**

In contrast to lead-acid batteries, lithium iron phosphate batteries can also be stored in a partially discharged state for a longer period of time without permanent damage.

● **Up to 70 % weight and space saving**

A 210 Ah LiFePO4 battery weighs 23 kg compared to a 70 kg lead-acid battery with the same nominal capacity

● **Existing capacity fully usable**

The full battery capacity is available, whereas lead batteries only provide around 50% of their nominal capacity.



The Epsilon lithium battery for direct replacement with a standard 90 Ah lead battery in 12 V systems, up to 3 batteries can be connected in parallel to increase capacity. Integrated charge and discharge management. No external components required!



The integrated battery management system in combination with an external relay protects the lithium cells against overcharging and deep discharge and monitors the cell temperature. The individual cells are also balanced.

The Nomada and Nomia lithium batteries are suitable for series (24 V, 48 V) and parallel circuits (higher capacity). The following external components are required - please inquire separately:

- BDSA safety relay to protect the Super-B battery against overcharging and deep discharge
- SBR safety relay
- M12 cable for internal communication of 24 V systems



			
■ Lithium Batteries	Epsilon 12V90E	Nomada 12V105E	Nomia 12V210E
■ Order-No.:	7 0101 2090	7 0101 2105	7 0101 2210
Nominal voltage	13,2 V	13,2 V	13,2
Capacity	<b>90 Ah, completely usable</b>	<b>105 Ah, completely usable</b>	<b>210 Ah, completely usable</b>
max. charging current	Automatic switch-off over 90 A	105 A (1C)	210 A (1C)
Lowest discharge voltage	10 V	10 V	10
Max. continuous current	200 A	315 A	500 A
Pulse discharging current 10 / 60 s.	350 A @ 10 s	525 A (10 s., Soc >60%)	800 A @ 10 s
EqPb (equals lead-acid-battery))	200 Ah	220 Ah	500 Ah
Operat. temperature (charge / discharge)	-10 bto 45 °C / -20 to 60°C	0 bis 55 °C / -20 to +55 °C	0 bis 55 °C / -20 to +55 °C
Interface	Bluetooth, CAN-open, CI-Bus (LIN)	CAN-open	CAN-open
Dimensions	L 353 x W 175 x H 190 mm	L 437 x W 90 x H 175 mm	L 417 x W 227 x H 314 mm
Weight	12,5 kg	10 kg	23 kg