

Deye SE-G5.1

5.12 kWh Low Voltage LiFePO4 Battery with 6000+ cycle life and IP20 protection.

Models Covered: SE-G5.1

Manufacturer: Ningbo Deye Technology Co., Ltd. (Stock Code: 605117.SH)

Application: The Deye SE-G5.1 is a high-performance LiFePO4 battery designed for efficient energy storage, ideal for residential and commercial applications. Built with safety and scalability in mind, it delivers consistent power while supporting long-term use. Expandable up to 64 units in parallel for a maximum of 327 kWh storage capacity.

Technical Specifications

Parameter	SE-G5.1
Electrical / AC Output Data	
Nominal Voltage	51.2 V
Operating Voltage Range	44.8 V – 57.6 V
Peak Current	100A(10 sec)
Status Indicator	3LED (working, alarming, protecting)
Battery Data	
Battery Energy Capacity	5.12 kWh
Nominal Capacity	100 Ah
Battery Type / Chemistry	LiFePO4
Cycle Life	≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL) cycles
Max Charge Current	50A (100A peak)
Max Discharge Current	50A (100A peak)
Recommended DoD	80%
Cell / Pack Configuration	1P16S
Protection Features	
IP Rating	IP20
Mechanical Data	
Installation / Mounting	Floor/Wall/Rack
Operating Conditions	
Charging Temperature Range	0 to 55 °C
Discharging Temperature Range	-20 to 55 °C
Max Altitude	≤2000m
Operating Temperature	Discharge:-20°C~55°C °C
Relative Humidity	0 ~ 95%
Storage Temperature Range	0°C~35°C °C

Parameter	SE-G5.1
Communication	
Communication Interface	CAN2.0, RS485

Note: Specifications are based on the official Deye SE-G5.1 datasheet. Values may be subject to change; always verify against the latest manufacturer documentation before system design and procurement.

Availability & grid compliance in UAE

Market	UAE
Grid authority / regulator	DEWA, ADDC, SEWA
Quotation currency	AED
Support hours timezone	Asia/Dubai
Delivery & installation coverage	Dubai, Abu Dhabi, Sharjah, Ajman, Ras Al Khaimah

Figures on this page are the manufacturer's own, measured at the test conditions the datasheet states — they do not change by country. What changes is the approval that has to be met before the unit is energised: in UAE that is DEWA, ADDC, SEWA. Confirm the grid code, import requirements and any local certification with them, or with us, before you order.

Key Features & Technical Highlights

- **5.12 kWh Capacity:** 100Ah nominal capacity with efficient LiFePO4 chemistry
- **Scalable to 327 kWh:** Connect up to 64 units in parallel for large installations
- **6000+ Cycle Life:** Long-lasting performance at 80% depth of discharge
- **5 Year Warranty:** Comprehensive manufacturer warranty included
- **Wide Temperature Range:** Operates from -20°C to 55°C for various climates
- **Smart Monitoring:** 5 LED indicators and remote monitoring support

Frequently Asked Questions

- ▶ How many SE-G5.1 units can I connect together?
- ▶ What inverters are compatible with the SE-G5.1?
- ▶ What is the expected lifespan of the SE-G5.1?
- ▶ Can I install the SE-G5.1 outdoors?

Official Source & Documentation

This technical datasheet is derived from official manufacturer documentation provided by **Ningbo Deye Technology Co., Ltd.**. For the latest specifications, firmware updates, and official documentation, visit the manufacturer's website.

- **Manufacturer Website:** www.deyeinverter.com
- **Technical Support:** sales@deyeinverters.net | +971 4 255 0887
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Disclaimer: All specifications and technical data presented on this page are based on the official Deye SE-G5.1 datasheet published by Ningbo Deye Technology Co., Ltd. Specifications are subject to change without notice. Always verify against the latest manufacturer documentation at deyeinverter.com before system design, procurement, or installation. Compliance with local regulations, grid codes (DEWA, ADDC, SEWA) and utility requirements in UAE is the responsibility of the system designer/installer.

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