

Deye RW-F16

16 kWh high-capacity battery with 8kW output, 160A charge/discharge, and 512 kWh scalability.

Models Covered: RW-F16

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

Application: The Deye RW-F16 is a powerhouse 16 kWh residential battery delivering up to 8 kW output with 160A charge and discharge current. Featuring 314Ah capacity, 14.4 kWh usable energy at 90% DoD, built-in circuit breaker, and scalability up to 512 kWh (32 units), it's the ultimate solution for large homes.

Technical Specifications

Parameter	RW-F16
Electrical / AC Output Data	
Rated AC Power	8 kW
Max Parallel Units	32
Nominal Voltage	51.2 V
Operating Voltage Range	44.8~57.6 V
Energy Throughput	52.5MWH (25°C,0.5C/0.5C,70%EOL) kWh
Battery Data	
Battery Energy Capacity	16 kWh
Max System Capacity	512 kWh
Nominal Capacity	314 Ah
Round-Trip Efficiency	90%
Usable Energy	14.4 kWh
Battery Type / Chemistry	LiFePO4
Cycle Life	≥6000 cycles
Max Discharge Current	160 A
Peak Charge/Discharge Current	300/300 (10 sec) A
Recommended DoD	90%
Charge Current	160 A
Protection Features	
IP Rating	IP20
Certification / Compliance Safety	UN38.3, MSDS
Mechanical Data	
Installation / Mounting	Wall-Mounted, Floor-Mounted
Operating Conditions	
Charging Temperature Range	0 to 55 °C

Parameter	RW-F16
Discharging Temperature Range	-20 to 55 °C
Max Altitude	≤2000m
Operating Temperature	15°C~35°C °C
Relative Humidity	0 ~ 95%
Storage Temperature Range	0°C~35°C °C
Communication	
Communication Interface	CAN2.0, RS485
Display	LCD(SOC and working state)

Note: Specifications are based on the official Deye RW-F16 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

- **16 kWh Capacity:** 14.4 kWh usable at 90% DoD
- **8 kW Output:** High power for demanding loads
- **160A Charge/Discharge:** Fast charging capability
- **Scalable to 512 kWh:** Up to 32 units in parallel
- **Remote Management:** Monitor via Deye inverter
- **Flexible Mounting:** Wall or floor installation

Frequently Asked Questions

- ▶ What inverters is the DEYE RW-F16 compatible with?
- ▶ Is the DEYE RW-F16 suitable for hot climates like the Gulf?
- ▶ What's the usable energy of the RW-F16?
- ▶ How much total storage can I build?

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
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- **Sales Inquiries:** sales@deyeinverters.net | +971 4 255 0887

Disclaimer: All specifications and technical data presented on this page are based on the official Deye RW-F16 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.