



Deye

Micro Hybrid Energy Storage System

MICRO HYBRID ESS

Suitable for on-grid, off-grid, and portable use

SUN-BK160/180/200-2.0KWH-EU-AM2



Hybrid Grid-Tied Mode
Self-consumption



Off-Grid Mode
Standalone & portable energy storage



AC-Coupled Mode
Upgrade the existing PV balcony system to ESS

96.5%

High Conversion Efficiency
DC-AC conversion efficiency of up to 96.5%

4ms

UPS-Grade Backup Power
Grid-tie and off-grid switchover time is less than 4ms



Quiet Operation
Fanless design with natural cooling



2000W Rated Power AC Charge/Discharge



Local Bluetooth Communication
Supports offline control
via the Deye Cloud APP

3200W

High-Power PV Input
Supports up to 4000W for PV access
and allows a maximum PV power input of 3200W

IP65

IP65 Protection Rating
10-year standard warranty



Deye
Wireless Energy Management System

Wireless Energy Management System
Smart plug, smart switch, wireless CT



Seamless Scalability
Easily expand the system with additional battery capacity





Model	AE-F2.0
Battery Technical Specification	
Battery Chemistry	LiFePO ₄
Battery Nominal Voltage	51.2V
Battery Nominal Energy	2000Wh
Max. Charging / Discharging Current	40A
Battery Operating Voltage	40V ~ 60V
Battery Cycle Life	≥6000 (@25°C±2°C, 0.5C / 0.5C, 70%EOL)
Parallel Capability	5 pcs*
Other Technical Specification	
Display	LED (SOC, Alarm)
Communication Interfaces	CAN2.0, LoRa
Dimension (W × D × H)	450 × 210 × 244mm
Weight Approximate (kg)	20
Operating Temperature Range	-10°C ~ 50°C
Max. Operating Altitude	2000m
Relative Humidity	0% ~ 95% (No Condensing)
Certification	UN38.3, IEC 62619, CE
Installation Style	Floor-Mounted
Warranty	10 years

*Maximum 5 Pieces AE-F2.0 Packs in Parallel, Up to 10kWh.



App Interface Subject to Change

SCENARIO-BASED ENERGY MANAGEMENT SOLUTIONS

Utilize energy in every outdoor adventure or household needs. Embrace effortless energy experience that's both eco-friendly and budget-friendly with our intelligent assistant.

Scenario 1 :



Compact Balcony Solar Plant
 Automated Energy-Saving Strategies

Scenario 2 :



Camping Power Solution
 Empower Your Outdoor Adventure

Scenario 3 :



Reliable Home Emergency Power Source
 Ensure You Stay Powered Up When You Need It Most

SMARTEN-UP YOUR HOME ENERGY

Real-time monitoring, with data information at a glance.
 Create scenario-based tasks that adapt to your daily routines.
 A smarter way to manage your electricity bills.

CONNECT, MONITOR, CONTROL

Seamlessly integrated with Deye devices for a smarter,
 more efficient energy experience.

User-friendly interface demystifies complex settings.
 Clear menu hierarchy, key information at your finger tips.

