

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

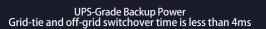


AC-Coupled Mode
Upgrade the existing PV balcony system to ESS



4ms

2





Quiet Operation Fanless design with natural cooling





Local Bluetooth Communication Supports offline control via the Deye Cloud APP



IP65

IP65 Protection Rating 10-year standard warranty







Installation Style

Warranty











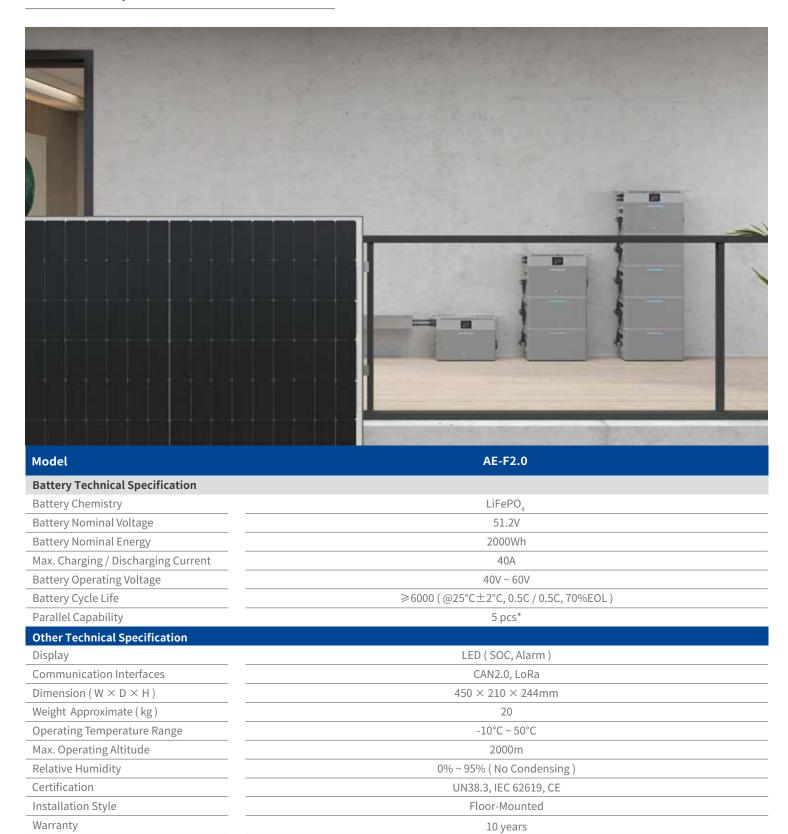
Model	SUN-BK160-2.0KWH-EU-AM2	SUN-BK180-2.0KWH-EU-AM2	SUN-BK200-2.0KWH-EU-AM2
AC Technical Specification			
Nominal Input / Output Power / UPS Power	1600 / 1600W	1800 / 1800W	2000 / 2000W
AC Input / Output Frequency and Voltage	50Hz (45Hz ~ 55Hz) , 60Hz (55Hz ~ 65Hz) , L / N (PE) , 220 / 230 Vac		
Grid Type	Single phase		
Rated Grid Input / Output Current	7.3A / 7.0A	8.2A / 7.9A	9.1A / 8.7A
Max.Grid Input / Output Current	8.0A / 7.7A	9.0A / 8.7A	10.0A / 9.6A
Peak Power (off-grid)	2 time of rated power, 10s		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Max. Bypass (Grid to Load)	12A		
DC Injection Current	THD<3% (Linear load<1.5%) mA		
PV Technical Specification			
Max. PV Access Power	3200W	3600W	4000W
Max. PV Input Power	2560W	2880W	3200W
Max. PV Input Current	32A+32A		
Max. PV Short-Circuit Current	48A+48A		
Rated PV Input Voltage	42.5V (20V ~ 55V)		
Start Up DC Voltage	25Vdc		
MPPT Voltage Range	20 ~ 55V		
Number of MPPT	2		
Battery Chemistry	LiFePO ₄		
Battery Nominal Voltage	51.2V		
Battery Nominal Energy	2000Wh		
Battery Operating Voltage	40V ~60V		
Battery Cycle Life	≥6000 (@25°C±2°C, 0.5C / 0.5C, 70%EOL)		
Other Technical Specification			
Display	Colorful Touch LCD & APP & Battery LED (SOC, Alarm)		
Communication Interfaces	Wi-Fi, Bluetooth, LoRa		
Dimension (W \times D \times H)	560 × 210 × 331mm		
Operating Temperature Range	-10°C ~ 50°C		
Max. Operating Altitude	2000m		
Relative Humidity	0% ~ 95% (No Condensing)		
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
Grid Regulation	IEC 61727,IEC 62116,CEI 0-21,EN 50549,NRS 097,RD 140,UNE 217002, OVE-Richtlinie R25,G98,VDE-AR-N 4105		
Battery Certification	UN38.3, IEC 62619		
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Floor-Mounted

10 years



♦☐ Battery Modules













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.







