



Micro Hybrid Energy Storage System

MICRO HYBRID ESS

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

AE-FS2.0-2H7



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



1000W Rated Power AC Charge/Discharge



Local Bluetooth Communication
Supports offline control
via the Deye Cloud APP

1600W

High-Power PV Input
Supports up to 2200W for PV access
and allows a maximum PV power input of 1600W

IP65

IP65 Protection Rating
5-year standard warranty

DeyeIoT
Deye Smart IoT System



Supports Deye Smart IoT System
Smart plug, smart switch, wireless CT



Seamless Scalability
Easily expand the system with additional battery capacity

All-In-One Module Integrated Solar Storage System

 1600W PV
MPPT Input

 2kWh
LFP Battery

 1000W On-grid and
Off-grid Operation

Model	AE-FS2.0-2H7
AC Technical Specification	
Nominal Input/Output Power/UPS Power	1000/1000W
AC Input/Output Frequency and Voltage	50Hz(45Hz~55Hz),60Hz(55Hz~65HZ,L/N(PE),220/230Vac
Grid Type	Single phase
Rated Grid Input/Output Current	4.6A/4.4A
Max.Grid Input /Output Current	5.0A/4.8A
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	10A
DC injection current	THD<3%(Linear load<1.5%)mA
PV Technical Specification	
Max. PV Access Power(W)	2200W
Max. PV Input Power	1600W
Max. PV Input Voltage(V)	60V
Start-up Voltage(V)	25
MPPT voltage range(V)	20-55
Full Load MPPT Voltage Range(V)	35-55
Rated PV Input voltage(V)	42.5V
Max. Input Short-Circuit Current (A)	27+27A
Max. Operating PV Input Current(A)	18+18A
No. of MPP Trackers/No. of Strings per MPP Tracker	2/1
Battery Technical Specification	
Battery Chemistry	LiFePO ₄
Battery Nominal Voltage	51.2V
Battery Nominal Energy	2000Wh
Max.Charging/Discharging Current	25A
Battery Operating Voltage	44.8V~57.6V
Battery Cycle Life	≥6,000 (@25°C±2°C, 0.5C/0.5C, 70%EOL)
Parallel Capability	Supports up to 4 AE-F2.0 Smart Extra Batteries up to 10kWh
USB Port Technical Specification	
USB-A Output	2ports, 5V, 2.4A, 12W Max per port
USB-C Output	2ports, 5V, 3.0A, 15W Max per port
Other Technical Specification	
Display	Colorful Touch LCD & APP & Battery LED(SOC,Alarm)
Communication interfaces	Wi-Fi, Bluetooth, Lora
Dimension(WX DX H)	450 × 210 × 321mm
Weight Appr.	26kg
Operating Temperature Range	-10°C ~ 50°C, >45°C Derating
Max.operating altitude	2,000m
Relative Humidity	0~ 95% (No Condensing)
Safety EMC/Standard	IEC62619,UN38.3,IEC/EN62109-1,IEC/EN62109-2,IEC/EN61000-6-1, IEC/EN61000-6-2,IEC/EN61000-6-3,IEC/EN61000-6-4
Grid Regulation	VDE4105,IEC61727/62116,VDE0126,AS4777.2,CEI0-21,EN50549-1, G98,G99,C10-11,UNE217002,NBR16149/NBR16150
Battery Certification	UN38.3,IEC62619
Installation Style	Floor-Mounted
Warranty	5 years



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

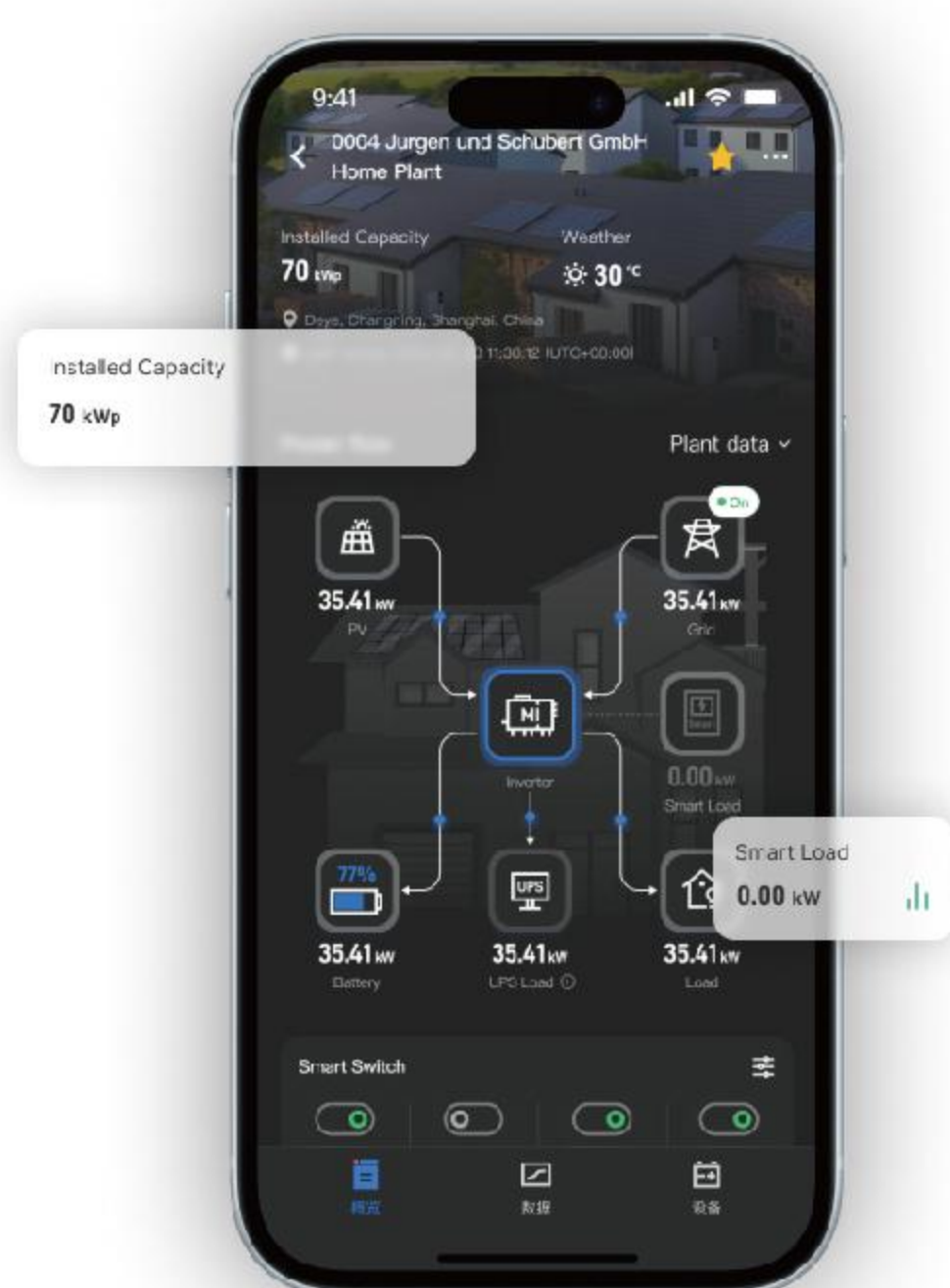
SMARTEN-UP YOUR HOME ENERGY

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.



Deye

To Make ESS Better



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