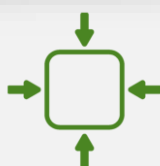


WECCO



Compatible with all string inverters
Everything integrated within the **NOOR APP** by **WeCo**



Reduced space
Only 1.5 mq occupied



Ideal for Retrofit
Grid Arbitrage

ARK-ESS

LIQUID COOLED ALL IN ONE BESS
(LI-KOOL AIO)

Innovative ALL IN ONE BESS
120kW ~ 261kWh

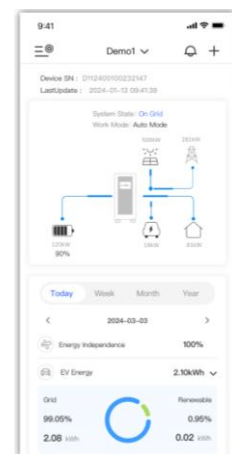


ARK-ESS

ARK-ESS 120/261

OUTDOOR ALL-IN-ONE BESS

Specifiche		120 kW PCS
PCS	PCS Output	120 kW threephase 400 VAC 50 Hz
	AC Rated Output Power	172 A
	DC Side PCS Voltage	680 - 1000 VDC
SYSTEM SPECIFICATIONS	Max. Battery Voltage	1000 VDC
	Min. Battery Voltage	680 VDC
	Configuration Minimum voltage	754 VDC
	Configuration Battery Max. Voltage	923 VDC
	Battery Module Specifications	52S liquid cooled
	Modules Number	5
	Module Capacity	314 Ah / 52.25 kWh
	System Capacity	261 kWh
	C-Rate	0.5C
	AC breaker and interruption capacity	250 A / 50 kA
AC Side	Nominal Voltage	400 VAC
	Voltage Range	400 VAC $\pm$ 15 %
	Rated Frequency	50 / 60 Hz
	Frequency Range	$\pm$ 3 Hz
	Power Factor (off-grid)	- 0.8 ~ +0.8
	Frequency Accuracy	0.2 Hz
	Voltage Ripple	< 3 %
	Current Ripple	< 2 %
	Harmonic Wave Output	< 3 %
SYSTEM	Average response time to external control	200 ms
	Switch time charge to discharge	20 ms
	Switch time discharge to charge	20 ms
	Startup without battery	Not supported
	Off-grid startup	Battery only = HMI operation granted
	Emergency Stop	600 ms
	IP	IP55
	Working Temperature	-20 °C ~ 55 °C (Derating T > 45 °C)
	Relative Humidity	0 % RH ~ 95 % RH, without condensation
	Altitude	T < 45 °C: 2000 m (Nominal), 2000 m ~ 4000 m Derating
ENVIRONMENT	Noise	< 75 dB
	Communication	RS485, CAN, Wi-Fi (SUNSPEC)
INTERFACE	Protocol	CAN, ModBus TCP/IP
	Installation	Outdoor installation possible *see manual for details
OTHERS	Max. Efficiency	97%
	Topology	Transformer Less
	Protection Class	Class I
	Cooling	Liquid cooled battery, air cooled PCS
	Dimensions (W x D x H) (mm)	1081 x 1100 x 2366



IP 55 OUTDOOR

ARK-ESS ALL IN ONE

0,5 C / LIQUID COOLED

Specifications

	261 kWh
BATTERY	Battery Type
	LiFePO4
	Cells
	3.2V, 314Ah
SYSTEM	Pack Assembly
	1P-312S
	Modules number
	5S
	Total Capacity
	261 kWh
	Net Capacity (@90% DoD)
	234 kWh
	Rated Voltage
	832VDC
	Voltage Range
	754VDC ~ 923VDC
	Current Charge / Discharge
	157 A
	Max. Battery Current Peak
	250 A
CYCLES	DoD Range (programmable)
	5-98%
	System Short Circuit Current (fuse protection)
	4200 A - 13 ms
COMMUNICATION	Battery Short Circuit Current
	9550 A - 80 ms
	HV BOX Fuse
	1500 V – 300 A
BMS PROTECTIONS	HV BOX Breaker
	1500V/300A Type C Automatic Thermal Protection
	HV BOX Contactor
	350A on both poles1500V
PASSIVE PROTECTIONS	Cycles A
	≥ 7500 (0.5C@ 90% DOD)
	Cycles B
	≥ 9.000 (0.5C@ 80% DOD,)
STORAGE	Battery Communication
	CAN
	External Communication
	RS485/232
BASE PARAMETERS	APP
	WeCo NooR App
	Cloud
	LAN + 4G
STORAGE	SoC Alarms
	Built-in
	Over and Undervoltage Protection
	Built-in
STORAGE	Overload protection
	Built-in
	High Temperature alarm
	Built-in
STORAGE	Smoke Sensor
	Built-in
	Firefigthing System
	Built-in
STORAGE	DC Protection
	Built-in
	SPD Protection
	Built-in
STORAGE	Max. Humidity
	RH ≤95% (Without Condensation)
	Storage Temperature Range
	0°C < T < +40°C
STORAGE	Low Temperature Operation (< 0°C)
	Required defrosting cycles with power derating
	Storage Temperature (SOC: 20%~50%)
	< 3 months: 0 < T < 45°C
STORAGE	Storage Temperature no maintenance (SOC : 20% ~ 50%)
	Max 5 months: 15 < t < 35°C
	Max. Altitude
	≤ 3000 m
STORAGE	Weight
	2800 kg
	IP
	IP55
STORAGE	Cooling and Heating
	Heat pump and chiller for liquid-cooled circuit
	Standby Self Consumption (AC + HV BOX)
	250 W
STORAGE	Standby Self Consumption (AC off with EMS command)
	50 W
	A/C consumption at maximum cooling power
	4500 W
STORAGE	A/C consumption at maximum heating power
	3500 W
	Self-consumption HV BOX
	20 W
STORAGE	Standard Cells and PCS
	UL 9540A/UL 1973/IEC 61619/CE/CEI016



ARK-ESS



We recommend that you contact WeCo for the most up-to-date data sheet, read the warranty and manual before making any purchasing decisions.
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ARK-ESS

LIQUID COOLED 120-261Kwh



WECo

The Next
Generation
**ARK-ESS
INVERTER**
it's here
and it's
WeCo.

BESS cabinet for retrofit installations equipped with WiFi Meter for integration with existing photovoltaic systems Immediate integration with NOOR APP.

Usable as self-consumption, hourly rates, peak reduction and in remote mode with EMS integration for arbitrage.

Efficient
Power
Integration

WECo

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