

M-ELV Battbank

MS-16K-U



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Key Features

Reliability

- Up to 10-year warranty
- IP66 protection rating
- No single point of failure impacts system operation
- Air-cooled, maintenance-free design

Safety

- The world's first AC stackable C&I battery
- Inherent safety: Extra-low voltage below 60 Vdc
- Passive safety: Fire-suppression built into every pack
- Active safety: Multi-sensor intelligence and protection

Smart

- Inter-pack automatic balancing
- Fast commissioning with smart system
- Pack-level monitoring for rapid fault location

Efficiency

- >90% AC round-trip efficiency
- High-power instant discharge: 12 kW/pack (10s)
- Max. discharge power: 10 kW/pack
- Max. stackable capacity: 112 kWh/cluster

Scalability

- Flexible expansion with minimal inventory and simplified design
- Modular design for easy transportation and scalable adaptation
- Maximum battery capacity with minimal footprint

Scenario-based

- Matrix phase control
- Compatible with all grid configurations



Items	Unit	MS-SCU-CNI ^a
Mechanical Data		
Weight	kg	12
Dimensions	mm	880 × 120 × 483 (W x H x D)
Indicator		LEDs for SOC & Status
Communication		FE, RS485, WLAN, Bluetooth, DI/DO
Cloud Service		ATMOCE Cloud & ATMOZEN APP

Items	Unit	MS-16K-U ^b
Performance Specification		
Rated Output Apparent Power	kVA	8
Max. Output Apparent Power	kVA	10
Rated Input Apparent Power	kVA	8
Nominal Voltage	V _{a.c.}	3/N/PE~220/380, 230/400, 240/415, 254/440, 277/480
Operating Voltage Range (L to N)	V _{a.c.}	176 to 305
Nominal Frequency	Hz	50 / 60
Frequency Range	Hz	45 to 55 @50 Hz, 55 to 65 @60 Hz
Max. Input Current	A	12.16 @ 380 Va.c., 11.55 @ 400 Va.c., 11.13 @ 415 Va.c., 10.50 @ 440 Va.c., 9.62 @ 480 Va.c.
Max. Output Current	A	15.19 @ 380 Va.c., 14.43 @ 400 Va.c., 13.91 @ 415 Va.c., 13.12 @ 440 Va.c., 12.03 @ 480 Va.c.
Peak Output Current	A	18.18 (10s)
Power Factor (On grid)		0.8 leading~0.8 lagging
Power Factor (Off grid)		1 leading~1 lagging
AC Round-Trip Efficiency	%	>90
THDi	%	<1.5

Battery Data		
Rated Battery Energy	kWh	16
Nominal Battery Capacity	Ah	314
Nominal DC Voltage	V	51.2
Max. DC Voltage	V	57.6
Chemistry		Lithium Iron Phosphate (LFP)
Number of Cycles		10,000
DC Round-Trip Efficiency	%	96
BMS		YES

System General Data		
Weight	kg	155
Stack Dimensions	mm	880 × 300 × 483 (W x H x D)
Mounting		Floor
Max. Stackbale Amount		7
Ambient Operating Temperature Range	°C	-30 to 55
Storage Temperature	°C	-30 to 60
Protection Class		I
Ingress Rating		IP66
Cooling		Intelligent Air Cooling
Operating Humidity (RH)	%	4 to 100, Condensing
Altitude	m	Up to 3,000
Pollution Rating		PD3

Items	Unit	MS-16K-U ^b
Protection		
AC Port Overvoltage Class		III
AC Surge Protection		TYPE II
Galvanic Isolation		YES
Insulation Resistance Monitor		YES
Anti-Islanding Protection		YES
Standard Compliance		
Compliance	UN38.3, IEC 62619, IEC 61000-6-1/-2/-3/-4, IEC 63056, IEC 62477-1, IEC 62040-1, VDE- AR-E 2510-50, ISO 13849, DIN VDEV0124-100, VDE-AR-N 4105/4110, EN 50549-1, AS4777	

Items	Unit	MS-ACCB-CNI ^c
Mechanical Data		
Weight	kg	35
Dimensions	mm	880 × 220 × 483 (W x H x D)

Items	Unit							
Number of Battery Modules	pcs	1	2	3	4	5	6	7
Total Energy Capacity	kWh	16	32	48	64	80	96	112
Total Weight	kg	202	357	512	667	822	977	1132
Total Height	mm	640	940	1240	1540	1840	2140	2440
Total Width	mm				880			
Total Depth	mm				483			

- a. MS-SCU-CNI: Stack Control Unit (SCU) Cap of M-ELV BattBank for C&I Application.
- b. MS-16K-U: 16kWh M-ELV BattBank.
- c. MS-ACCB-CNI: AC Connection Base of M-ELV BattBank for C&I Application.