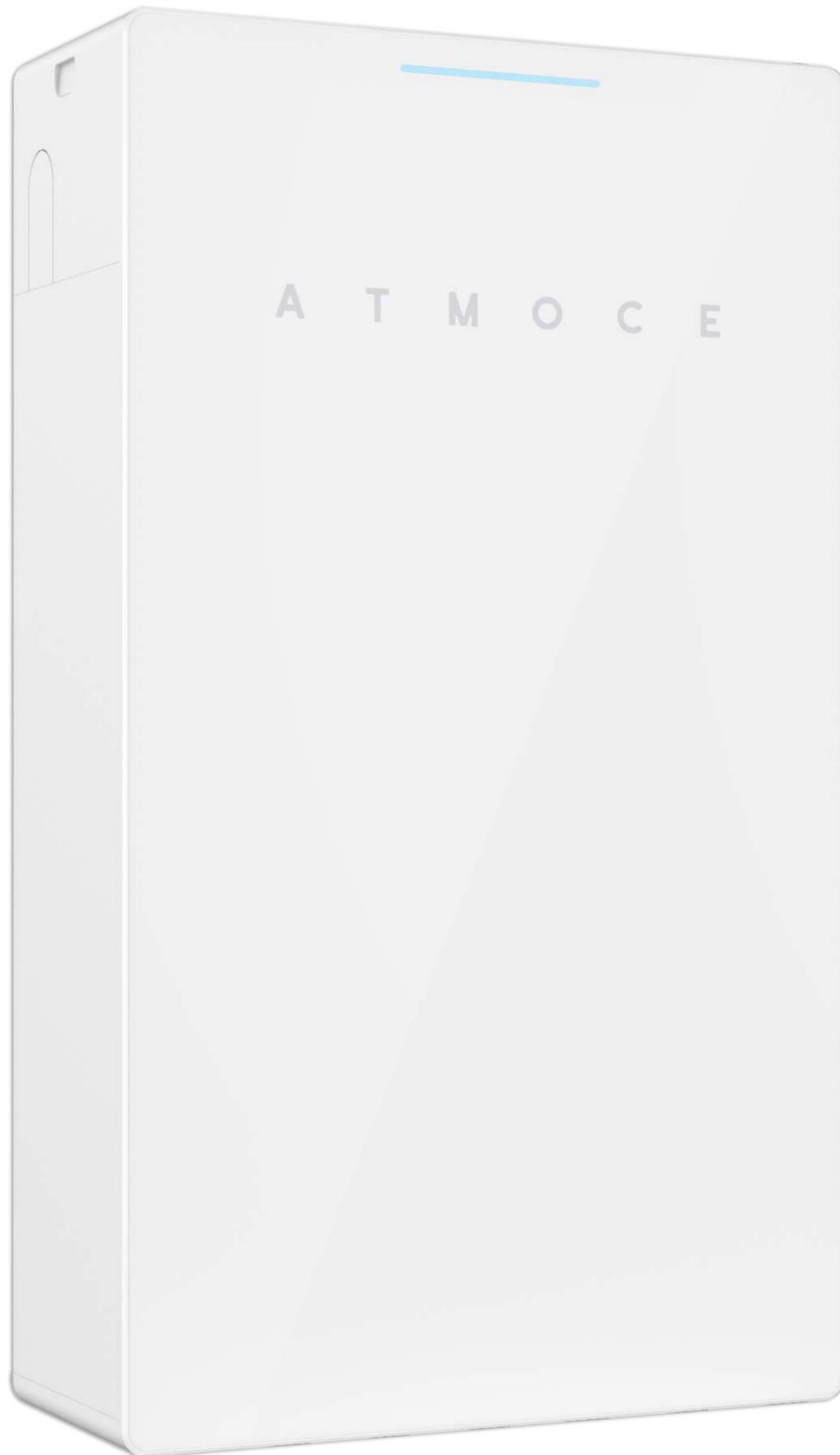


**ATMOCE**

Data Sheet

## **M-ELV Battery**

MS-7K-U/MS-7K16A-S



# Key Features

## Ultimate Safety

- <30 Vdc extra low voltage
- Lithium iron phosphate (LFP) chemistry
- Cell level management and optimization
- Galvanic isolation between battery and grid

## Flexibility & Adaptability

- One SKU for all 1-phase, 3-phase & stand alone installations
- AC coupling, compatible with 3rd-party PV and EMS systems
- Supports self-consumption, TOU and grid ancillary services modes

## Higher Power

- 90% AC round trip efficiency
- 3.75 kVA Max. continuous input power, 5 kVA Max. output power
- 126 kWh scalability<sup>a</sup>

## More Reliability

- 15-year warranty
- 10,000 cycles
- Electrolytic capacitors free



a. This value defines the maximum scalable capacity achievable with one M-Gateway.

Items	Unit	MS-7K-U	MS-7K16A-S
<b>Electrical Parameters</b>			
Max. continuous output power	kVA	4.5	3.68
Max. output power	kVA	5	3.68
Max. continuous input power	kVA	3.75	3.68
Nominal voltage	V <sub>a.c.</sub>	1/N/PE ~ 220, 1/N/PE ~ 230 3/N/PE ~ 220/380, 3/N/PE ~ 230/400	1/N/PE ~ 230
Operating voltage range (L to N)	V <sub>a.c.</sub>	176 - 276	
Nominal frequency	Hz	50 / 60	
Frequency range	Hz	45-55 @50 Hz, 55-65 @60 Hz	
Max. input current	A	17.05 @ 220 Va.c., 5.70 @ 380 Va.c. 16.30 @ 230 Va.c., 5.41 @ 400 Va.c.	16.00 @ 230 Va.c.
Max. output current	A	22.73 @ 220 Va.c., 7.58 @ 380 Va.c. 21.74 @ 230 Va.c., 7.25 @ 400 Va.c.	16.00 @ 230 Va.c.
Power factor (adjustable)		0.8 leading...0.8 lagging	
AC round-trip efficiency	%	90	
THDi	%	<3	
<b>Battery</b>			
Rated battery energy	kWh	7	
Nominal battery capacity	Ah	280	
Nominal DC voltage	V	25.6	
Max. DC voltage	V	28.8	
Chemistry		Lithium iron phosphate (LFP)	
Number of cycles		10,000	
DC round-trip efficiency	%	96	
<b>Mechanical data</b>			
Dimensions (without bracket)	mm	830 × 480 × 195 (H x W x D)	
Lifting weight (without bracket)	kg	73.5	
Mounting		Floor or wall mount	
Ambient operating temperature range	°C	-20 to 55	
Optimum operating temperature range	°C	0 to 30	
Storage temperature	°C	-20 to 55	
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	
Operation Noise	dB	< 35	

Items	Unit	MS-7K-U	MS-7K16A-S
<b>Protection</b>			
AC port overvoltage class			III
AC surge protection			TYP II
Galvanic Isolation			YES
Insulation resistance monitor			YES
Anti-islanding protection			YES
<b>Features and compliance</b>			
Indicator		LEDs for SOC & Status	
Communication		CAN	
Services <sup>b</sup>		Self-consumption, TOU, Grid ancillary services	
Cloud Service		ATMOCE Cloud & ATMOZEN APP	
Compliance		IEC 62619, ISO 13849, IEC 61000-6-1, IEC 61000-6-3, IEC 63056, IEC 62477-1, VDE- AR-E 2510-50	

b. Work together with ATMOCE Gateway.