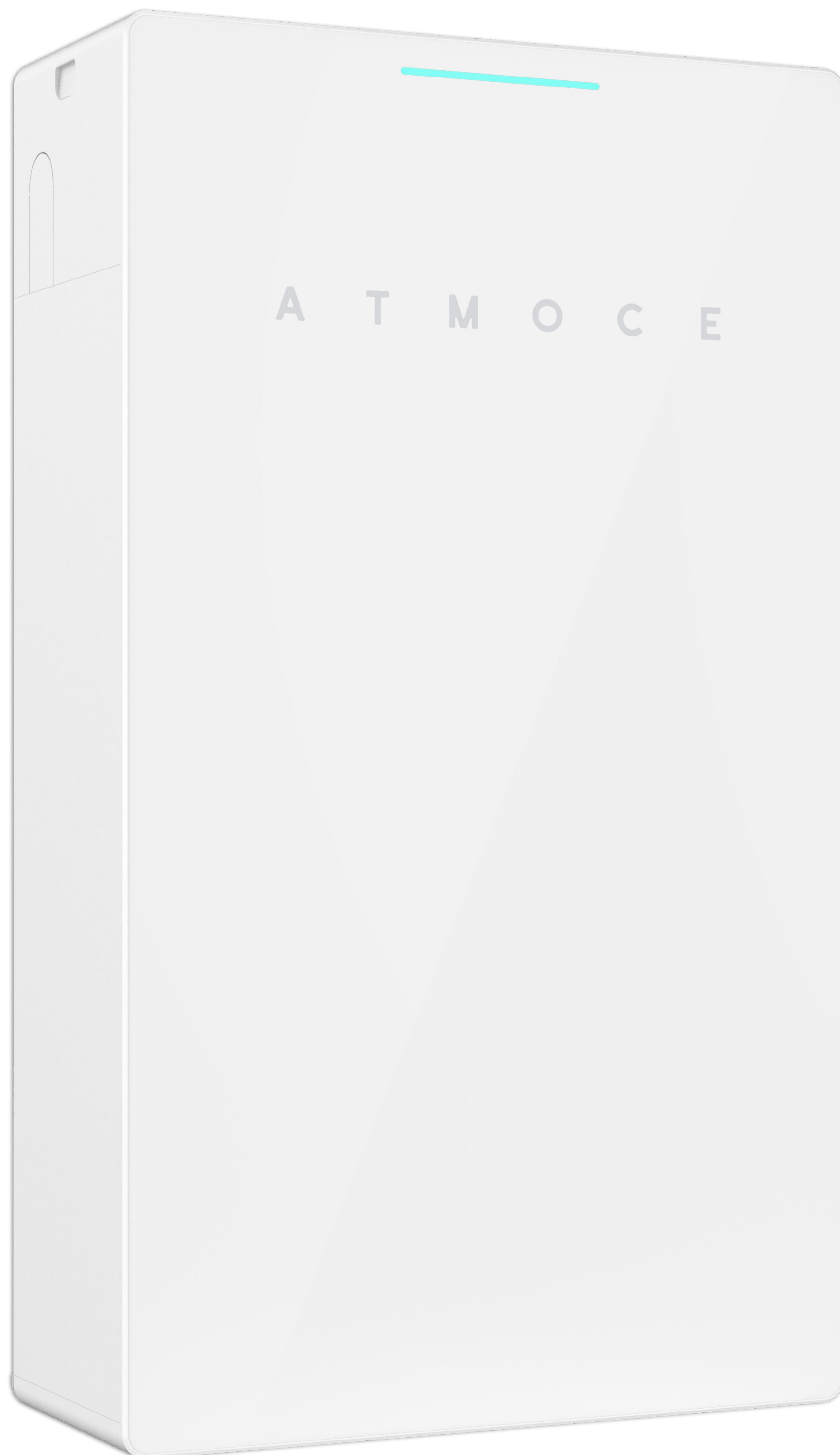


ATMOCE

Data Sheet

M-ELV Battery

MS-8K-U / MS-8K-U Pro



Key Features

Reliability

- Up to 25-year warranty
- DAB-based AC architecture

Efficiency

- 90% AC round-trip efficiency^a
- Maximizes self-consumption

Safety

- Human-operation-safety voltage: Battery system <30V
- Intrinsically safe AC system, No DC Arc
- Lithium iron phosphate (LFP) chemistry

Scalability

- One SKU for all retrofit scenarios
- Compatible for 1-phase/3-phase/split-phase
- Compatible with 3rd-party PV systems

Smart

- Battery cell optimization
- Smart energy management
- VPP service support

Scenario-based

- Matrix phase control



a. Measured under the following conditions: Charged and discharged at a constant power of 700 W at ambient temperature.

Items	Unit	MS-8K-U	MS-8K-U PRO
Electrical Parameters ^b			
Max. continuous output power	kVA	4.5	
Max. output power	kVA	5	
Max. continuous input power	kVA	4	
Nominal voltage	V _{a.c.}	1/N/PE ~ 220, 1/N/PE ~ 230 3/N/PE ~ 220/380, 3/N/PE ~ 230/400	
Operating voltage range (L to N)	V _{a.c.}	176 - 276	
Nominal frequency	Hz	50 / 60	
Frequency range	Hz	45-55 @50 Hz, 55-65 @60 Hz	
Max. intput current	A	18.18 @ 220 Va.c., 6.08 @ 380 Va.c. 17.39 @ 230 Va.c., 5.77 @ 400 Va.c.	
Max. output current	A	22.73 @ 220 Va.c., 7.60 @ 380 Va.c. 21.74 @ 230 Va.c., 7.22 @ 400 Va.c.	
Power factor (on-grid)		0.8 leading...0.8 lagging	
Power factor (off-grid)		1.0 leading...1.0 lagging	
AC round-trip efficiency	%	90 ^a	
THDi	%	<3	
Battery			
Rated battery energy	kWh	8	
Nominal battery capacity	Ah	314	
Nominal DC voltage	V	25.6	
Max. DC voltage	V	28.8	
Chemistry		Lithium iron phosphate (LFP)	
Number of cycles		10,000	15,000
DC round-trip efficiency	%	96 ^c	
Mechanical data			
Dimensions (without bracket)	mm	830 × 480 × 195 (H x W x D)	
Lifting weight (without bracket)	kg	76.5	
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	

b. On-site power limit settings can be configured in accordance with grid requirements.
c. Measured under the following conditions: Charged and discharged at a constant power of 0.2C.

Items	Unit	MS-8K-U	MS-8K-U PRO
Protection			
AC port overvoltage class			III
AC surge protection			TYPE II
Galvanic Isolation			YES
Insulation resistance monitor			YES
Features and compliance			
Indicator			LEDs for SOC & Status
Communication			CAN
Services ^d			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

d. Work together with ATMOCE Gateway.