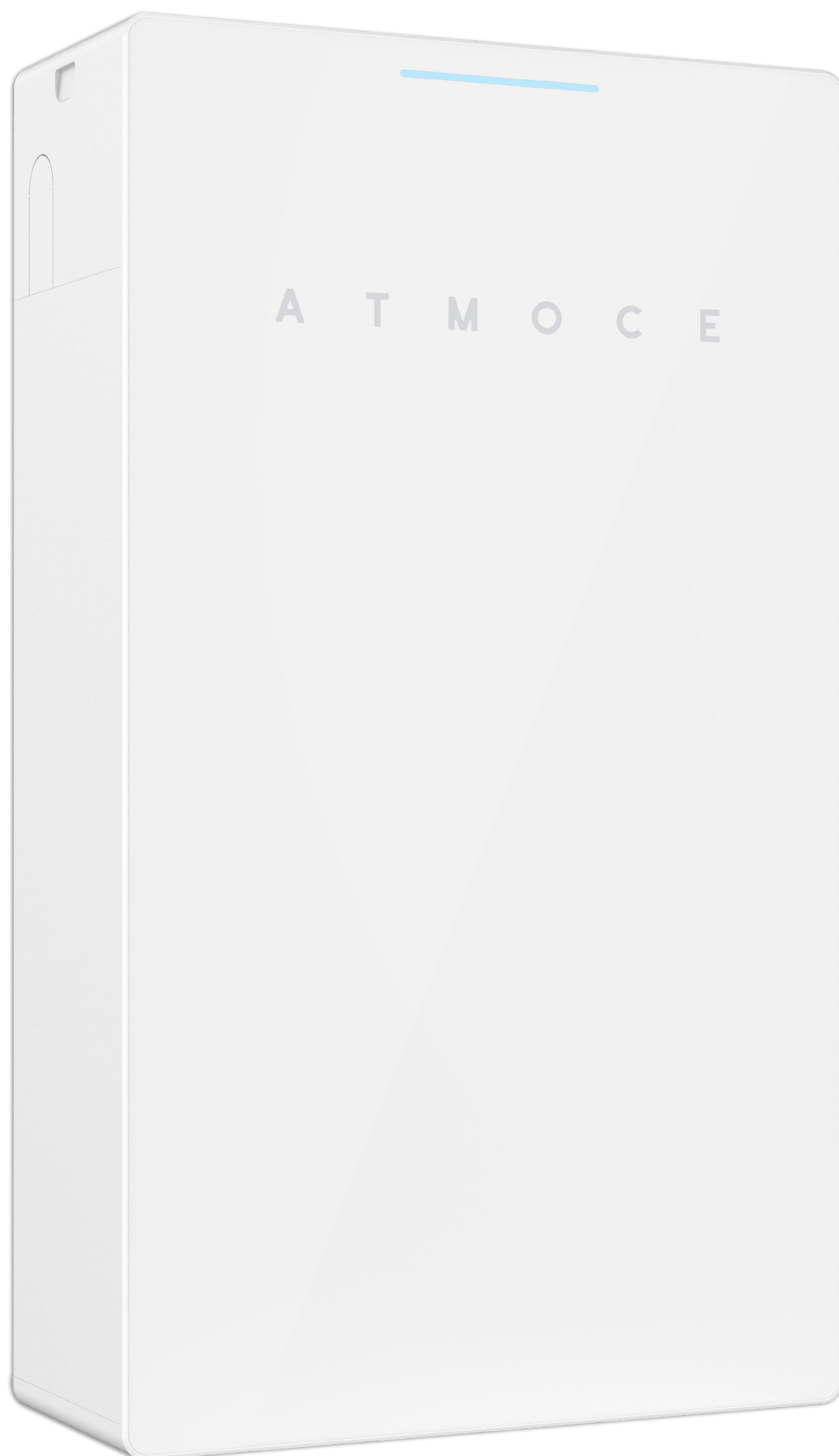


ATMOCE

M-ELV Battery

MS-7K-U



Data Sheet

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

Higher Power

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

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

More Reliability

- 10-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
Electrical Parameters		
Max. continuous output power	kVA	4.5
Max. output power	kVA	5
Max. continuous input power	kVA	3.75
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. input current	A	17.05 @ 220 V _{a.c.} , 5.70 @ 380 V _{a.c.} 16.30 @ 230 V _{a.c.} , 5.41 @ 400 V _{a.c.}
Max. output current	A	22.73 @ 220 V _{a.c.} , 7.58 @ 380 V _{a.c.} 21.74 @ 230 V _{a.c.} , 7.25 @ 400 V _{a.c.}
Power factor (adjustable)		0.8 leading...0.8 lagging
AC round-trip efficiency	%	90
THDi	%	<3
Battery		
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
Mechanical data		
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
Protection		
AC port overvoltage class		III
AC surge protection		TYPE II
Galvanic Isolation		YES
Insulation resistance monitor		YES

Items	Unit	MS-7K-U
Features and compliance		
Indicator		LEDs for SOC & Status
Communication		CAN
Services ^b		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.