

M-Battery MS-7K-U



Key Features

Intelligence & Flexibility

- Compatible with single-phase and three-phase systems
- Supports backup, self-consumption, TOU and grid ancillary services modes
- AC-coupled, compatible with 3rd-party PV and EMS systems
- Intelligent management via ATMOCE Cloud and ATMOZEN APP

Power & Scalability

- 7 kWh battery energy
- 4.5 kW nominal discharging power, 5 kW maximum discharging power
- Modular design supports quick and flexible scaling
- Enables integration of both legacy and new system

Safety & Reliability

- 15-year warranty
- DC voltage below 30 V for safety
- 5-layer advanced safety protection
- Lithium Iron Phosphate (LFP) chemistry

Simple & Adaptability

- Easy installation, quick activation
- Features streamlined communication architecture
- IP66-rated for diverse installation scenarios
- Immersion up to 50 cm, resistant to severe weather



Items	Unit	MS-7K-U
Electrical Parameters		
Nominal output power	kW	4.5
Max. output power	kVA	5
Nominal input power	kW	3.75
Nominal voltage	V _{a.c.}	220 / 380 230 / 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		
Battery energy	kWh	7
Nominal DC voltage	V	25.6
Max. DC voltage	V	29.2
Chemistry		Lithium iron phosphate (LFP)
Mechanical data		
Dimensions (H x W x D)	mm	830*480*195 (without bracket)
Lifting weight	kg	73.5 (without bracket)
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
Ingress Rating		IP66

Items	Unit	MS-7K-U
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
Insulation resistance monitor		YES
Features and compliance		
Indicator		LEDs for SOC & Status
Communication		CAN
Services ^a		Backup, 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

a. Work together with ATMOCE Gateway



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