

Single-phase M-Combiner Lite MC100L



Key Features

Safety & Reliability

- IP65 design for indoor and outdoor installations
- Reliability verification in extreme scenarios
- Reinforced insulation for improved safety

Flexibility & Intelligence

- Remote management of home electricity
- Bi-directional communication between devices and Atmoce-Cloud
- All-in-one app to guide the installation and configuration

High Power Capability

- Max. PV power of 5 kW
- Max. battery capacity of 7 kWh

Easy Installation

- Pre-installed and pre-connected
- Easy system activation by using the Atmozen app
- Lightweight design



What's in the combiner M-Gateway Lite 1 × board SPD 1 × unit, In: 20 kA, 2-pole SPD breaker 1 × unit, 20 A, 2-pole PV-side breaker ⁴ 1 × unit, 63 A, 2-pole, PCD 30 mA Battery-side breaker 1 × unit, 32 A, 2-pole Battery-Side breaker 1 × Unit, 32 A, 2-pole Battery-CT 1 × CT, accurate up to 0.1% Consumption CT interface 1 × CT signal interface, accurate up to 0.1% PV Relay 25 A integrated relays Electrical parameters Electrical parameters Electrical parameters Single-phase PV Relay 2 220/230/240 Operating voltage range (L to N) V 184 to 276 Nominal frequency Hz 50/60 Extended frequency range Hz 45 to 65 Max. PV branch 1 1 Max. PV current/branch ^h A 20 Max. Extery capacity kWh 7 Nominal CT current A 30 AC surge protection TYPE II Overvoltage category III McChanical	Items	Unit	MC100L
SPD breaker 1 × unit, 1n: 20 kA, 2-pole PV-side breaker 1 × unit, 25 A, 2-pole PV-side breaker 1 × unit, 20 A, 2-pole Grid-side breaker 1 × unit, 32 A, 2-pole Battery-side breaker 1 × unit, 32 A, 2-pole Battery CT 1 × CT, accurate up to 0.1% Consumption CT interface 1 × CT signal interface, accurate up to 0.1% PV Relay 25A integrated relays Electrical parameters Single-phase Mominal voltage V 220/230/240 Operating voltage range (L to N) V 184 to 276 Nominal frequency range Hz 50/60 Extended frequency range Hz 45 to 65 Max. PV branch 1 1 Max. PV current/branch* A 20 Max. buttery capacity kWh 7 Nominal CT current A 32 Max. buttery capacity kWh 7 Nominal relay current A 20 Max. calsage category III Nominal relay current A 25	What's in the combiner		
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Grid-side breaker 1 × unit, 32 A, 2-pole, RCD 30 mA Battery-Side breaker 1 × CT, accurate up to 0.1% Consumption CT interface 1 × CT signal interface, accurate up to 0.1% PV Relay 25A integrated relays Electrical parameters Single-phase Grid setup Single-phase Nominal voltage V 220/230/240 Operating voltage range (L to N) V 184 to 276 Nominal frequency Hz 50/60 Extended frequency range Hz 45 to 65 Max. PV current/branch* A 20 Max. Description A 32 Max. battery current A 32 Max. battery capacity kWh 7 Nominal CT current A 80 AC surge protection TYPE II Overvoltage category III Nominal relay current A 25 Mechanical parameters A 25 Dimensions (W x H x D) mm 337 × 237 × 99 Weight R 2.4 <	SPD breaker		1 × unit, 25 A, 2-pole
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Dimensions (W x H x D) mm 337 × 237 × 99 Weight kg 2.4 Ambient temperature range °C -30 to 50 Cooling Natural convection Enclosure environmental rating Outdoor, IP65 Power cable sizes mm² PV side: 2.5 to 4 Grid side: 6 to 10 Battery side: 4 to 6 Communication cable sizes mm² 0.25 to 0.75 Communication PLC, Wi-Fi, BLE, ETH, CAN Noise dB <25 Altitude m 3000 Protection class II	Max. relay current	А	25
Dimensions (W x H x D) mm 337 × 237 × 99 Weight kg 2.4 Ambient temperature range °C -30 to 50 Cooling Natural convection Enclosure environmental rating Outdoor, IP65 Power cable sizes mm² PV side: 2.5 to 4 Grid side: 6 to 10 Battery side: 4 to 6 Communication cable sizes mm² 0.25 to 0.75 Communication PLC, Wi-Fi, BLE, ETH, CAN Noise dB <25 Altitude m 3000 Protection class II			
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Power cable sizes mm² Grid side: 6 to 10 Battery side: 4 to 6 Communication cable sizes mm² 0.25 to 0.75 Communication PLC, Wi-Fi, BLE, ETH, CAN Noise dB <25 Altitude m 3000 Protection class II	Enclosure environmental rating		Outdoor, IP65
Communication PLC, Wi-Fi, BLE, ETH, CAN Noise dB <25 Altitude m 3000 Protection class II	Power cable sizes ^c	mm²	Grid side: 6 to 10
NoisedB<25Altitudem3000Protection classII	Communication cable sizes	mm²	0.25 to 0.75
Altitude m 3000 Protection class II	Communication		PLC, Wi-Fi, BLE, ETH, CAN
Protection class II	Noise	dB	<25
	Altitude	m	3000
Pollution degree III	Protection class		II
	Pollution degree		III

a. The standard configuration of the PV-side breaker is 20A, which can be replaced with a 25A rated circuit breaker, supporting a maximum of 5kW.

b. The capacity of the PV branch current can be increased to 25A by replacing the PV side breaker to 25A.

c. Refer to the local electrical regulations to select the cable size.

Communication	interfaces	
PV side	PLC	Support
Grid side		1 × interface for consumption CT
Battery side	CAN	Support
Load side	ETH	1 × interface, 100 Mb/10 Mb auto-adaptability
Atmoce-Cloud	Wi-Fi	2.4 GHz
	ETH	1 × interface, 100 Mb/10 Mb auto-adaptability
Atmozen app	BLE	2.4 GHz
Indicators		3 × LEDs
Compliance		
Safety		IEC 61439-1/-2
Health		IEC 62311
EMC		EN 301 489-1/-17, IEC 61000-6-1/-2/-3/-4
Radio spectrum		EN 300 328
PLC		EN 50065-1/-2