

**ATMOCE**

Data Sheet

## **M-Combiner Pro**

MC100PRO-T3P/MC100PRO-S1P





# 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

## Power Outage Protection

- On-grid / off-grid mode
- Seamless switching < 10 ms
- Integrates diesel generator and 3rd party solar power

## Easy Installation

- Pre-installed and pre-connected
- Easy system activation by using the ATMOZEN app
- Simplified Wiring





Items	Unit	MC100PRO-T3P	MC100PRO-S1P
<b>What's In The Combiner PRO</b>			
M-Gateway MG100		1 × MG100	1 × MG100
Gateway Breaker		1 × unit, 10 A, 3-pole	1 × unit, 10 A, 1-pole
3rd Party PV-side Breaker <sup>a</sup>		1 × unit, 63 A, 3-pole	1 × unit, 63 A, 1-pole
PV-side Breaker <sup>a</sup>		1 × unit, 63 A, 3-pole	1 × unit, 63 A, 1-pole
Grid-side Breaker		1 × unit, 63 A, 3-pole	1 × unit, 63 A, 1-pole
Non Backup Terminal		1 × unit, 3-pole	1 × unit, 1-pole
Battery-side Breaker		1 × unit, 63 A, 3-pole	1 × unit, 63 A, 1-pole
Bypass Breaker		1 × unit, 63 A, 3-pole	1 × unit, 63 A, 1-pole
Backup Load Breaker		1 × unit, 63 A, 3-pole	1 × unit, 63 A, 1-pole
PV CT		3 × CTs, accurate up to 0.1%	1 × CT, accurate up to 0.1%
Battery CT		3 × CTs, accurate up to 0.1%	1 × CT, accurate up to 0.1%
Consumption CT Interface		3 × CTs, accurate up to 0.1%	1 × CT, accurate up to 0.1%
<b>Electrical Parameters</b>			
Grid Setup		Three-phase	Single-phase
Nominal Voltage	V	380/400/415V <sub>a.c.</sub>	220/230/240V <sub>a.c.</sub>
Operating Voltage Range (L to N)	V	176 to 276	176 to 276
Nominal Frequency	Hz	50/60	50/60
Extended Frequency Range	Hz	45 to 65	45 to 65
Overtoltage Category		III	III
<b>Mechanical Parameters</b>			
Dimensions (W × H × D)	mm	475 × 650 × 150	
Weight	kg	22	
Ambient Temperature Range	°C	-30 to 50	
Cooling		Natural convection	
Enclosure Environmental Rating		Outdoor, IP65	
Wire Sizes <sup>b</sup>	mm <sup>2</sup>	Pv side: 6 to 16   Grid side: 6 to 16   Battery side: 2.5 to 16	
Communication Cable Sizes	mm <sup>2</sup>	0.25 to 0.75	
Communication		PLC, Wi-Fi, BLE, ETH, CAN, RS485	
Noise	dB	<35	
Altitude	m	3000	
Protection Class		II	
Pollution Degree		III	

a. The standard configuration of the PV-side breaker is 20A, which can be replaced with a 25A / 32A rated circuit breaker, supporting a maximum of 30kW.

Items	Unit	MC100PRO-T3P	MC100PRO-S1P
<b>Communication Interfaces</b>			
Grid Side	DRM0		Support
Battery Side	CAN		Support
Load Side	ETH	1 × Interface, 100 Mb/10 Mb Auto-adaptability	
	Digital I/O	4 × 12 V DO, 3 × DI	
	RS485	Support	
	Digital I/O for Generator	1 × DO, 1 × DI, 1 × RS485	
Atmoce-Cloud	Wi-Fi	2.4 GHz	
	ETH	1 × Interface, 100 Mb/10 Mb Auto-adaptability	
Atmozen App	BLE	2.4 GHz	
Indicators		5 × LEDs	
<b>Compliance</b>			
Safety		IEC 61439-1/-2	
Health		IEC 62311	
EMC		EN 301 489-1/-17, IEC 61000-6-1/-3	
Radio Spectrum		EN 300 328	
PLC		EN 50065-1/-2	

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