

ATMOCE

Data Sheet

M-Combiner PRO

MC100PRO-T3P / MC100PRO-S1P



Key Features

Reliability

- IP65-rated enclosure for reliable indoor and outdoor use
- Rigorously tested in extreme conditions for proven durability

Safety

- Reinforced insulation to prevent electrical hazards
- Built-in protection against overload, overvoltage, and short circuits

Smart

- Remote monitoring and control of home energy usage
- Supports VPP functionality and hierarchical load management

Efficiency

- Pre-installed and pre-wired for rapid on-site deployment
- Simplified wiring design for faster and easier installation

Scalability

- Seamless retrofit expansion without any redesign
- Flexible integration with any third-party solar systems

Scenario-based

- Automatic on-grid/off-grid switching to power critical loads during outages
- Seamless <10 ms switching for uninterrupted power to essential appliances



Items	Unit	MC100PRO-T3P	MC100PRO-S1P
What's in the combiner PRO			
M-Gateway MG100		1 × MG100	1 × MG100
Gateway Breaker		1 × unit, 10 A, 3-pole	1 × unit, 10 A, 1-pole
PV-side Breaker ^a		1 × unit, 50 A, 3-pole	2 × unit, 50 A, 1-pole
Battery-side Breaker		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
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
Non-backup terminal		1 × unit, 63 A, 3-pole	1 × unit, 63 A, 1-pole
PV CT		1 × three phase 80A CT	2 × single phase 80A CT
Battery CT		1 × three phase 80A CT	1 × single phase 80A CT
Consumption CT		1 × three phase 80A CT	1 × single phase 80A CT
M-Relay		1 × MR100-T	1 × MR100-S
Electrical parameters			
Grid setup		Three-phase	Single-phase
Nominal voltage	V	380/400/415Va.c.	220/230/240Va.c.
Operating voltage range (L to N)	V		176 to 276
Nominal frequency	Hz		50/60
Extended frequency range	Hz		45 to 65
Overvoltage category			III
Mechanical parameters			
Dimensions (W × H × D)	mm		389 × 616 × 127
Weight	kg	11	10
Ambient temperature range	°C		-30 to 50
Storage temperature range	°C		-40 to 70
Relative humidity range	%		4 to 100, condensing
Enclosure environmental rating			Outdoor, IP65
Cooling			Natural convection
Noise	dB		<25
Pollution degree			III
Altitude	m		3000
Installation			Wall mounted
Communication			Wi-Fi, BLE, ETH, CAN, RS485, Digital I/O

a. According to the site conditions, the switch may be changed as appropriate, but the total current on the PV side shall not exceed 50A.

Items	Unit	MC100PRO-T3P	MC100PRO-S1P
Communication interfaces			
PV side	Wireless		Support
Battery side	CAN		Support
Grid side	DRM0		1 X RJ45 interface
Load side	ETH	1 × interface, 100 Mb/10 Mb auto-adaptability	
	Digital I/O		4 × 12 V DO, 3 × DI
	RS485		1 × interface
Atmoce-Cloud	Wi-Fi		2.4 GHz
	ETH	1 × interface, 100 Mb/10 Mb auto-adaptability	
Atmozen app	BLE		2.4 GHz
Generator	Digital I/O		1 × DO, 1 x DI
	RS485		1 × interface
Indicators			5 × LEDs
Compliance			
Safety			IEC 61439-1/-2
Health			IEC 62311
EMC		EN 301 489-1/-17, IEC 61000-6-1/-3	
Radio spectrum			EN 300 328
Applicable Countries/Area			Australia

