

MEGA Converter Cabinet 500 kW

500–3,000 kW |



What is the MEGA Converter Cabinet? The MEGA (500ML / 3000ML) pairs a 500 kW bidirectional PCS with an STS and a built-in isolation transformer. Each unit connects up to 2 storage systems (250 kW × 2) at 400 VAC and can be paralleled 6-fold to serve up to 12 storage systems. Built-in UPS auxiliary power and an optional ATS input port make distribution design simple.

500–3,000 kW

Scalable Power

2–12

Storage Systems

0 ms

Active Switching

IP21

Protection Class

KEY FEATURES

- ✓ Automatic Transfer
Automatic grid/off-grid switching and synchronization; VSG grid-forming compatible, seamless for all diesel generator types.
- ✓ Fast Switching
Active switching 0 ms; passive switching < 20 ms.
- ✓ Smart Coordination
Up to 6 units in parallel; intelligent scheduling for optimal power allocation.
- ✓ Distribution Friendly
Built-in UPS for auxiliary power supply; optional ATS input port.
- ✓ Electrical Safety
Built-in isolation transformer for complete electrical isolation.

TECHNICAL SPECIFICATION

Parameter	500ML (×1)	3000ML (×6)
Parallel Units		
Units	1	6 (max 6 in parallel per site)
Storage Port		
Max Connected Storage Systems	2	12
Rated Storage System Power	250 kW × 2	250 kW × 12
Grid Port		
Rated Power	500 kW	500 kW × 6
Rated Voltage	400 VAC	400 VAC
Connection	3W+N+PE	3W+N+PE
Grid Voltage Range	–20% ~ +15%	–20% ~ +15%
Frequency	50 / 60 Hz	50 / 60 Hz
THDi	< 3%	< 3%
Load Port		
Rated Power	500 kW	500 kW × 6
THDu	< 1% (linear) < 5% (non-linear)	—
Grid/Off-Grid Switching Time	< 20 ms	< 20 ms

Parameter	500ML (×1)	3000ML (×6)
Recommended Max Load Power	70% × storage system power	—
Diesel Generator Port		
DG ATS	Optional ATS (DG connects to grid port when no grid available)	—
Transformer		
Isolation Transformer	Built-in	Built-in
System		
Dimensions (W×D×H)	1600 × 1050 × 2050 mm	1600 × 1050 × 2050 mm
Weight	2665 kg	2665 kg × 6
Protection Rating	IP21	IP21
Cooling Method	Air cooling	Air cooling
Communication	RS485 / Modbus TCP-IP	RS485 / Modbus TCP-IP
Operating Temperature	-15 °C ~ 45 °C	-15 °C ~ 45 °C
Operating Altitude	4000 m (derated above 2000 m)	—

Models 500ML / 3000ML — up to 6 units in parallel per site; full datasheet available on request.
Specifications are subject to change without notice.