MEtaPower

THREE-PHASE AC-CONNECTED CONVERTER FOR RELIABLE BACKUP POWER

Complete solution; Ready for installation; Efficient power use

The MEtaPower Battery Converter is a three-phase AC-connected converter that, together with a battery system, provides reliable backup power during peak demand times and charges the battery during periods of low demand.

The system can be integrated with an AC generator or connected to a grid to provide efficient power usage.

The MEtaPower Battery converter is configurable to ensure optimal storage or generation of power according to the user's requirements.

Fully qualified for land-based installations.

Key Features

- Integrated EMS/PMS
- Adaptable for different battery types
- Integration with other energy sources
- Diesel Generator integration
- Power stabilisation due to fast response time
- Bi-directional power flow
- Four-quadrant Converter
- Modbus control
- Optional remote monitoring
- DC and AC side contactor
- Modular Design for custom systems
- Configurable charge / discharge scheme to suit demand.

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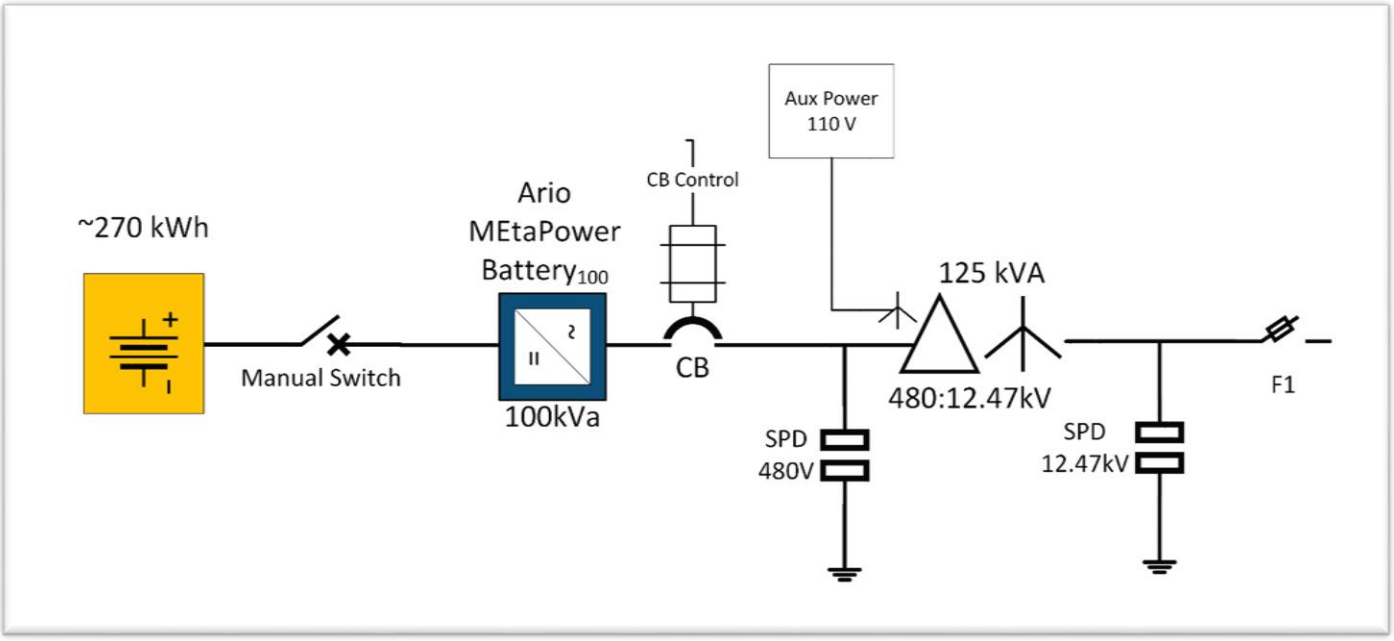
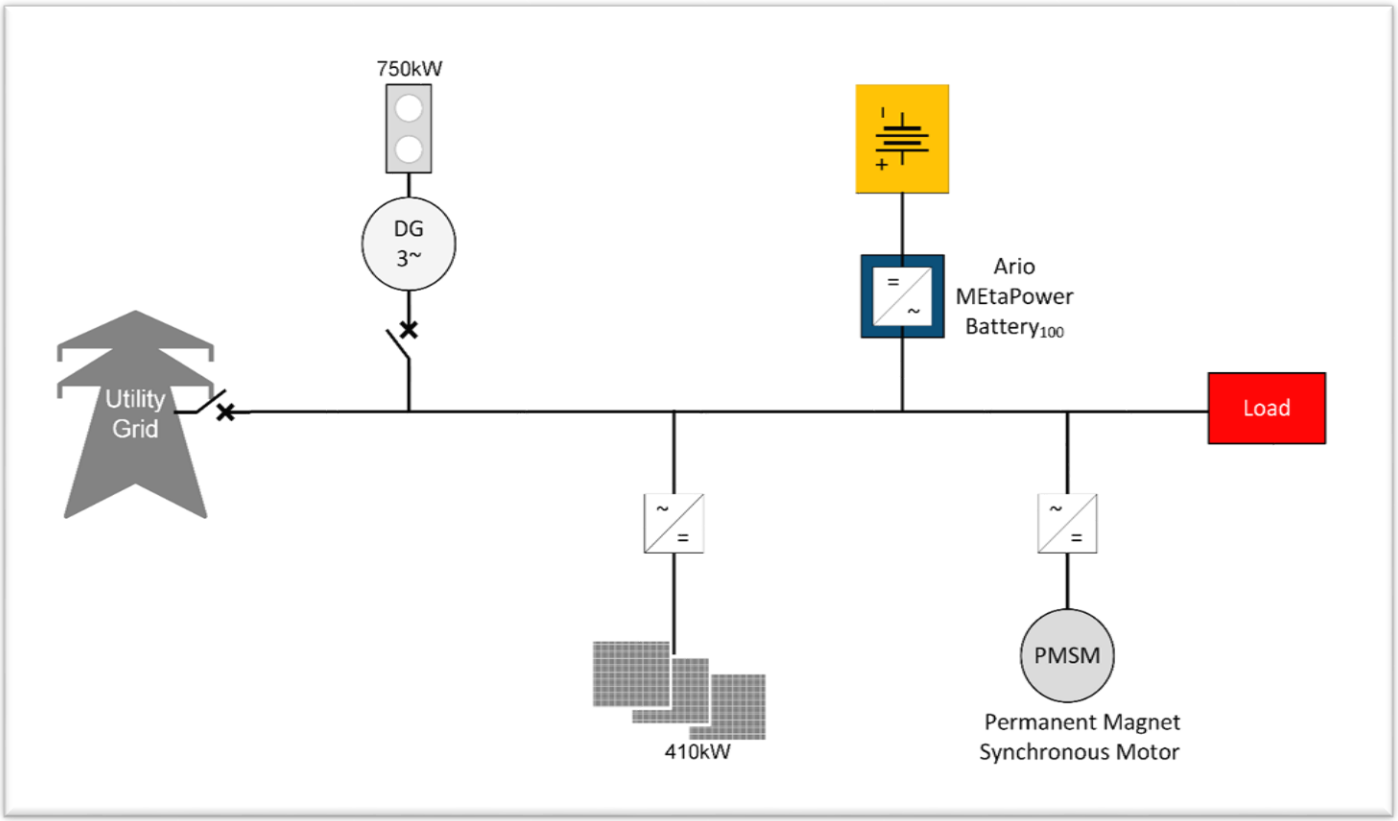
Installation diagram

Ario MEtaPower Battery can be installed in Medium Voltage applications.



Application diagram

Ario MEtaPower Battery100 integrates with other energy sources.



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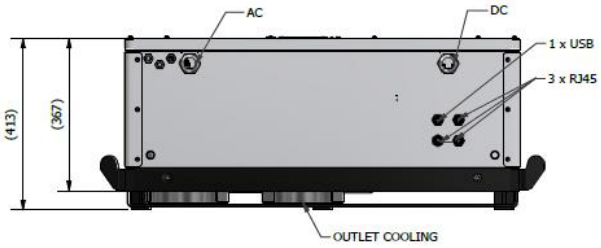
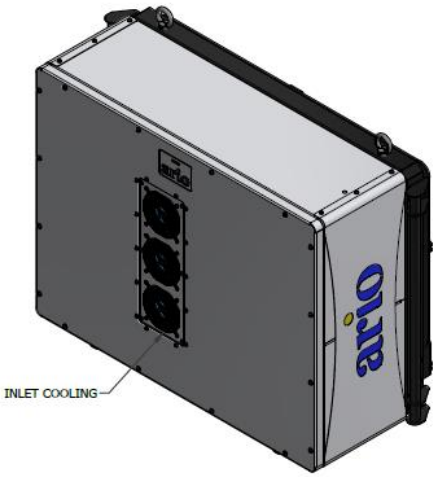
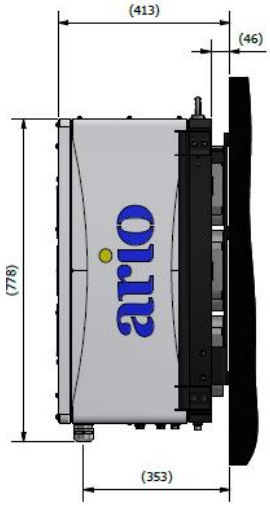
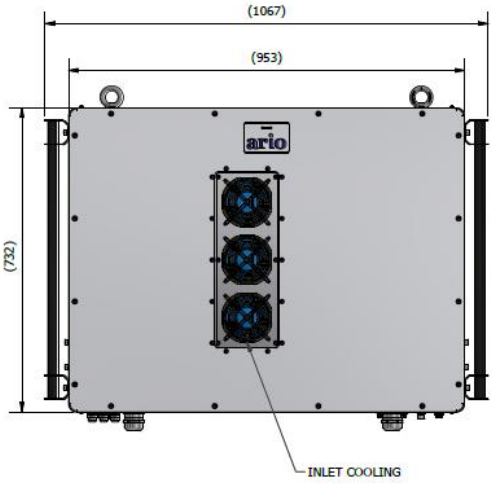
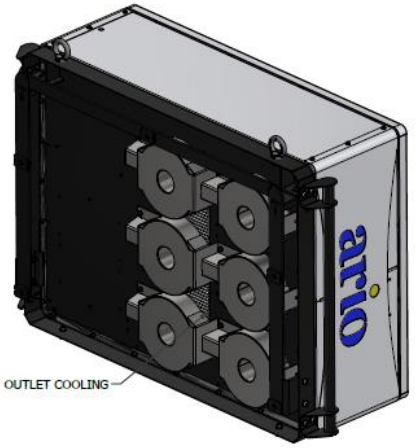
Physical dimensions – Inverter











Specification – MEtaPower Battery$_{100}$

DC Input / Output data			
Operating range	580V - 1100V	790V – 1500V	990V – 1500V
Max. discharging / charging current	181A		
AC Input / Output data			
Rated output	100 kVA at 400Vac	140 kVA at 550Vac	180 kVA at 690Vac
Line voltage	380V – 690Vac(3/PEN)		
Rate frequency (range)	50/60 Hz (42 - 68 Hz)		
Rated current	3 x 150A		
Reactive power / cos phi	0 - 100% Smax / 0.3 ind. - 0.3 cap		
Grid connected current THD	<3%		
Off-grid voltage THD	<3%		
Crest Factor	1.6		
General data			
Max. efficiency	98.1% at 400Vac		
European efficiency	97.10%		
CEC efficiency	97.20%		
Parallel operation	Microgrid/ Voltage and Frequency Droop control		
Circuitry topology	Multilevel		
Protective Functions	Overload protection; Overcurrent protection; Anti-islanding; Under/overvoltage; Over/under frequency		
Mechanical data			
Display	LEDs		
Interfaces	RS485 [Modbus RTU] Ethernet 100BaseTX [Modbus TCP/IP] CAN		
Fault signalling relay	potential-free NOC max. 30V/1A		
Ambient temperature	Operating range: -20°C - +60°C		
Humidity	95% Non-condensing		
Min. distance from coast	2000 m		
Cooling	temperature controlled fan		
Protection class	IP 66		
Noise emissions	<75dBA @ 1m		
H x W x D	953x 732 x 413mm		
Weight	171kg		
Certifications			
Safety	IEC 62109 -1/-2, EN 61000-6-2/-4		
Grid code connection	RPP 3.0, NRS 097		

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