

NEO SERIES

- Turnkey AC Coupled Battery System
- Liquid Cooled with Fire Suppression
- Outdoor Freestanding Solution
- Intelligent Power Control Software

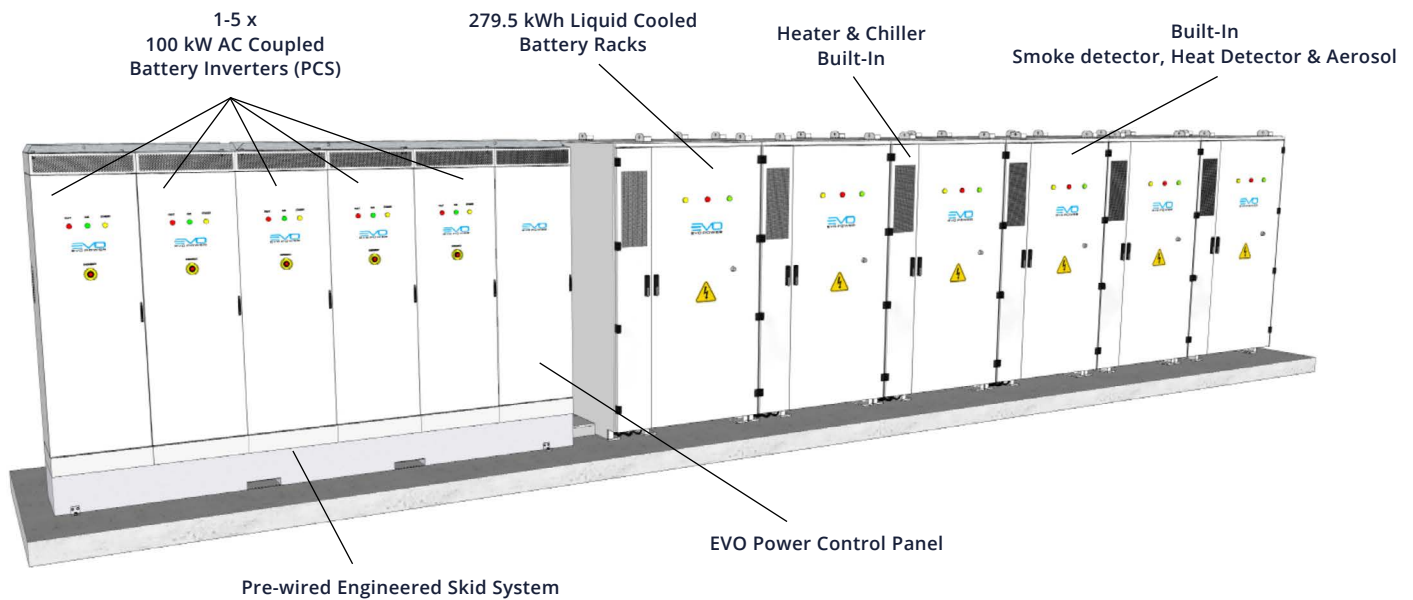


100 kW / 250 kWh to MW / MWh

BATTERY ENERGY STORAGE SYSTEMS

POWER YOU CAN TRUST THAT WON'T COST THE EARTH

SYSTEM COMPONENTS



NEO 500 kW / 1,500 kWh example solution shown

HARDWARE FEATURES



- o Lithium Iron Phosphate Chemistry
- o Industry leading Value/Performance
- o Liquid Cooled Battery Modules
- o Fire Suppression System Built-In



- o DELTA Electronics 100kW Inverter
- o High Voltage / High Efficiency
- o 400 VAC 3 Phase Output (4 wire)
- o Backup Power - Coming Soon
- o Fast response for FCAS Applications

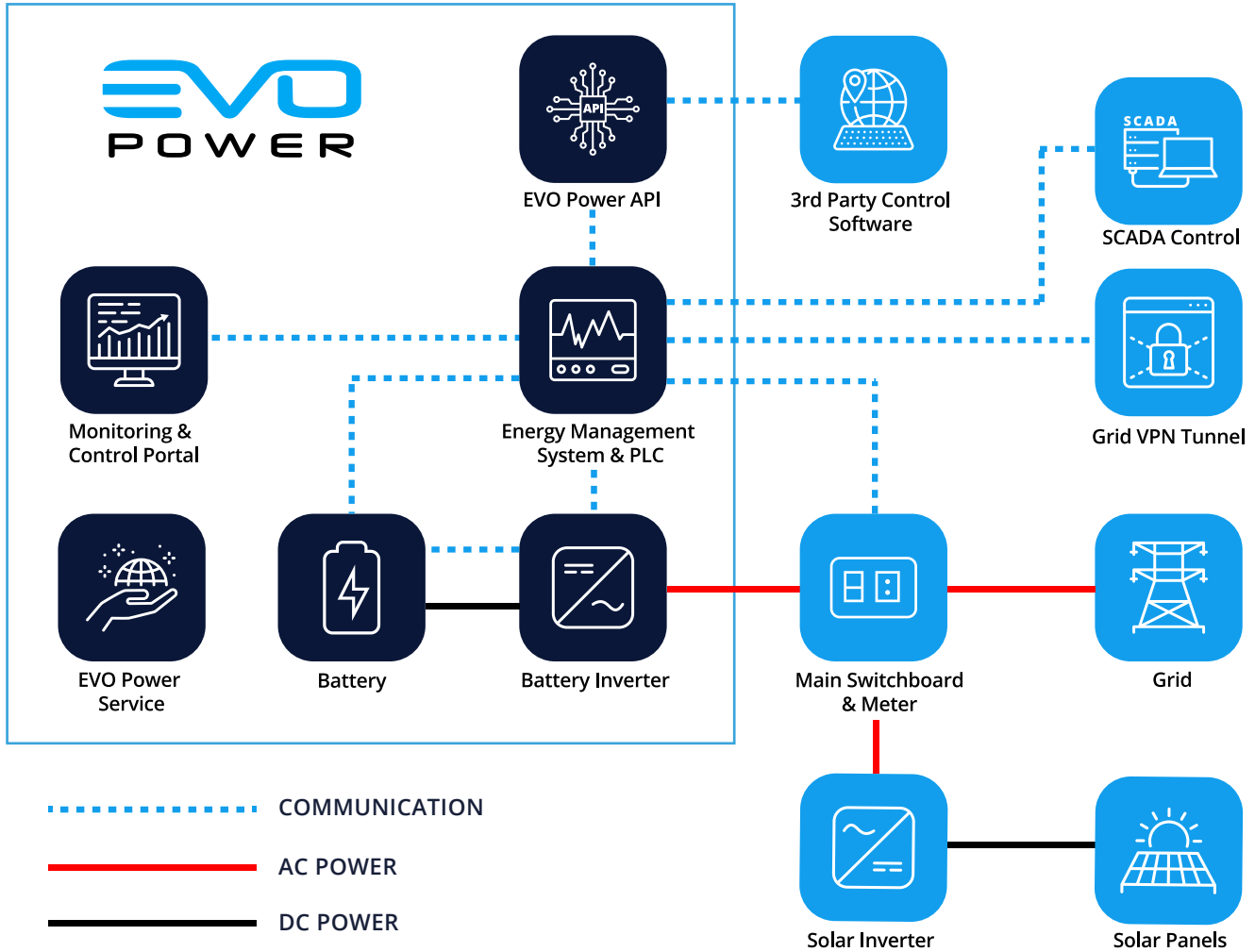


- o High Quality Control Hardware
- o EVO API for 3rd Party VPP Aggregators
- o EVO Advanced Monitoring Platform
- o Full Monitoring of Compatible PV Systems
- o Cyber Security (DIN EN ISO/IEC 27001)



- o Preconfigured Control Panel
- o AC & DC Protection Devices
- o Energy Management System
- o Power Controller & Ethernet Switch
- o Energy Management System UPS

SYSTEM SCHEMATICS



POWER CONTROL APPLICATIONS



Energy Management System & PLC

- ≡ Solar Self Consumption
- ≡ Peak Shaving
- ≡ Optional SCADA functionality
- ≡ Optional Demand Response
- ≡ Utility VPN Control Tunnel
- ≡ Utility Meter Reading Capability
- ≡ Optional Solar Inverter Control
- ≡ Programmable Logic Controller

≡ EVO Power Cloud Server & API for 3rd Party System Control for Orchestration of Grid Services

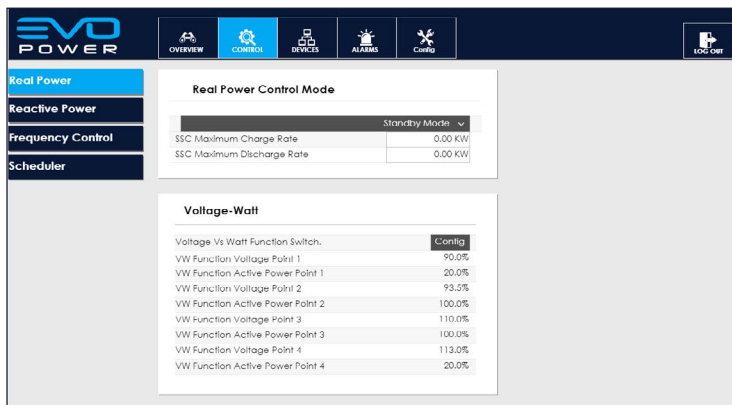
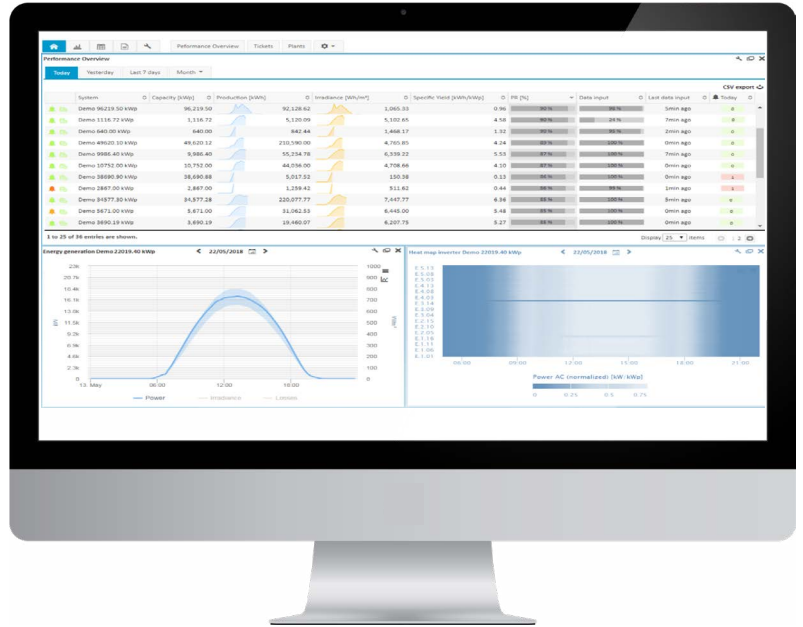


- FCAS / Grid Services
- Energy Arbitrage
- Virtual Power Plant
- Integration with other platforms

EVO EMS (Energy Management System)

EVO MONITORING PLATFORM

- ≡ Dashboard for a System-Specific Overview
- ≡ Individual Configuration of Alarm Criteria
- ≡ Mobile Monitoring with iPhone and Android App
- ≡ Calendar for Coordinating Service Deployments
- ≡ Individual Reporting, CSV Export of all Measurement Data
- ≡ Fleet Review - Tabular Display of all the Key Performance Indicators for all Systems

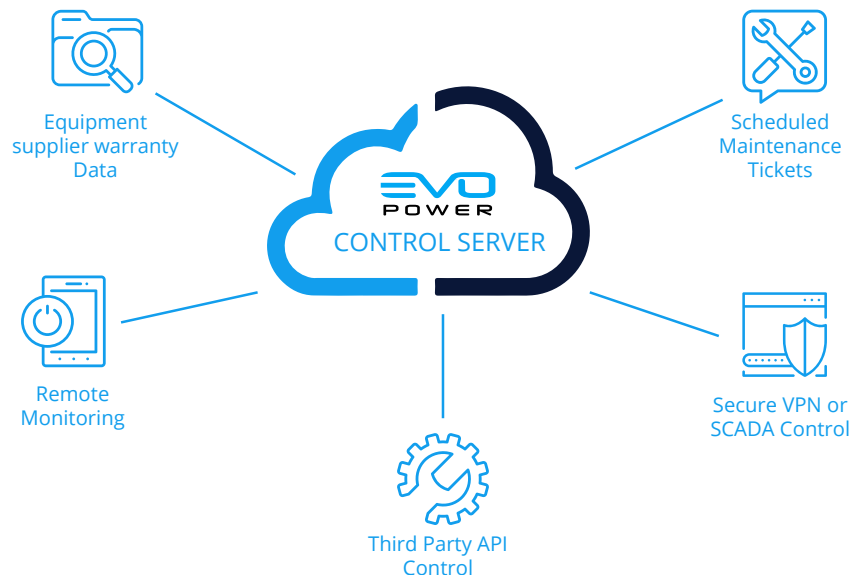


EVO REMOTE CONTROL PLATFORM

- ≡ Graphical User Interface for Configuration
- ≡ Programmable Peak Shaving Fixed Value and Characteristic Curve Control
- ≡ Active Power and Reactive Power Control
- ≡ Ramp Rate Control - Coming Soon

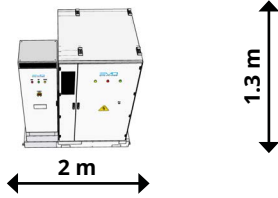
EVO CONTROL SERVER PLATFORM

- ≡ Optional Control via Third Party Optimisation / VPP Aggregator
- ≡ Agnostic API Control Commands
- ≡ Open Platform
- ≡ Optional Secure VPN or SCADA Control
- ≡ Single Asset or Fleet Management

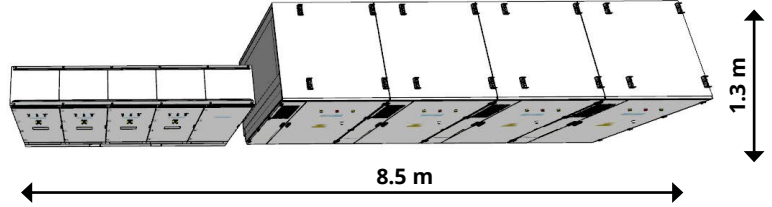


SCALABILITY CONFIGURATIONS

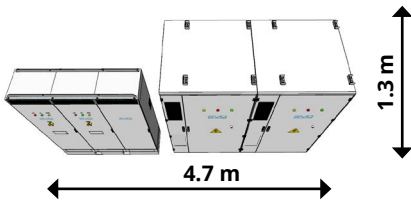
NEO AiO 100 kW / 250 kWh



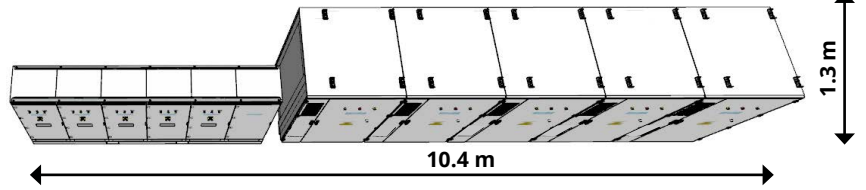
NEO 400 kW / 1000 kWh



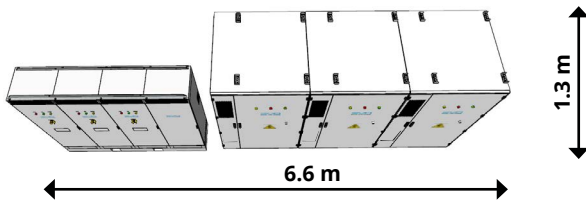
NEO 200 kW / 500 kWh



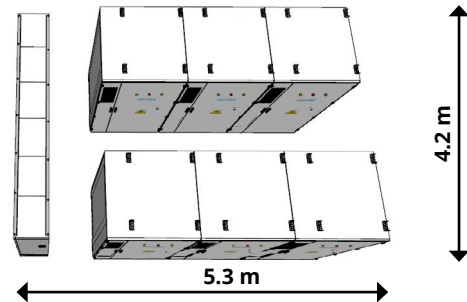
NEO 500 kW / 1,250 kWh



NEO 300 kW / 750 kWh

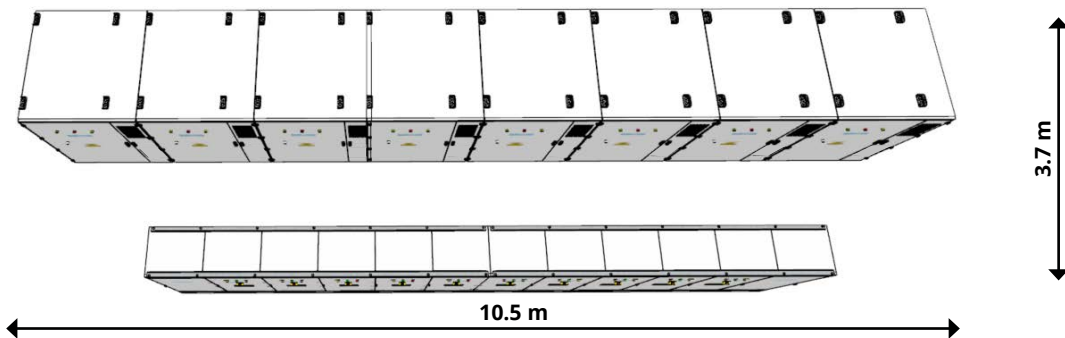


NEO 500 kW / 1,500 kWh

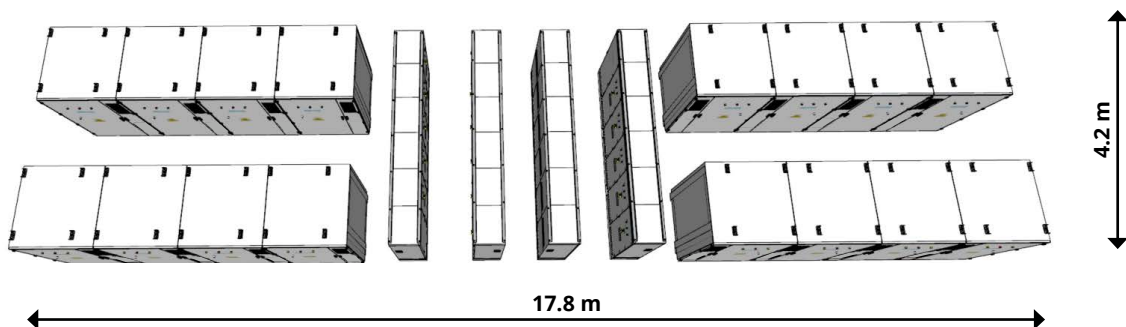


MW PARALLEL SCALABILITY

1 MW / 2 MWh (2x NEO 500 kW / 1,000 kWh)



4x NEO 500 kW / 1,000 kWh



INVERTER SPECIFICATIONS	NEO 100 kW	NEO 200 kW	NEO 300 kW	NEO 400 kW	NEO 500 kW
Rated AC Power	100 kVA / kW	200 kVA / kW	300 kVA / kW	400 kVA / kW	500 kVA / kW
Max. AC Power	110 kVA / kW	220 kVA / kW	330 kVA / kW	440 kVA / kW	550 kVA / kW
Rated Grid Voltage	380 VAC / 400 VAC				
Grid Voltage Range	310 ~ 450 VAC				
Rated AC Current	145 A	290 A	435 A	580 A	725 A
Total Harmonic Distortion	<3%				
Rated Grid Frequency (Range)	50 Hz (45 ~ 55 Hz)				
Peak Efficiency	98%				
Power Factor	-1 to 1, continuously adjustable				
ENERGY STORAGE (Parallel up to 6x 279.5 kWh racks per system)					
Nominal Energy DC (Max. useable energy DC) ¹	279.5 kWh (260 kWh) for 0.5C Cells		note. 259.5 kWh (252.3 kWh) for 1C Cells		
Max. useable energy AC (BOL) ¹	250 kWh for 0.5C Cells		note. 244 kWh for 1C Cells		
Voltage Range (Nominal Voltage)	873.6 ~ 1,123 VDC (998.4 VDC)				
Chemistry	LFP				
ENVIRONMENTAL					
Operating Temperature Range / Humidity Range	-30~55 °C (Inverter derating at 45 to 55 °C) / 0 to 95% RH non condensing				
IP Ratings	Energy Storage IP66, EVO Control Panel IP54, Inverter IP55				
FEATURES					
VPP & Grid services platform	YES – Capable through EVO Power API & 3 rd Party Aggregator				
AC & DC Isolation Devices	Internal AC & DC Isolation prewired and included as standard				
Pre-Integrated Fire Suppression System	Fire Suppression system with smoke and heat detectors plus aerosols				
COMPLIANCE					
Inverter related standards	AS/NZS 4777.2, VDE-AR N4105, IEC/EN 62477.1, IEC 62109-1/-2, IEC/EN 61000.6.2, IEC/EN 61000.6.4, IEC 60068.2.64				
Battery related standards	UN 38.3, UL 1973, UL 9540A, IEC 62619, IEC 61000.6.2/4				
DIMENSIONS & WEIGHTS					
System dimensions (mm, L x W x H)	1,200 x 780 x 2,280 for 100 kW inverter Skid, 600 mm longer per additional 100 kW, 1,300 x 1,300 x 2,280 for each Battery Rack (Part No 1127 - 2039 x 1310 x 2280 mm)				
Weight of key components	500 kg for 100 kW inverter Skid, 250 kg heavier per additional 100 kW, 2,840 kg per 279.5 kWh Battery Rack (Part No 1127 - All in One 3,520 kg)				

1. Useable energy & Nominal Energy is based on beginning of battery life at 25 °C and at peak efficiency charge/discharge rate

All specifications are at 25 °C and rated DC input voltage unless otherwise stated, values may be different at higher or lower temperatures. Please refer to the detailed warranty documentation at the EVO Power website: www.evopower.com.au/neo_warranty
 Specifications may be updated without notice, please refer to the EVO Power website for the current information.

SYSTEM DESCRIPTION	EVO PART NO.	CHARGE / DISCHARGE POWER (AC kW) ²	USEABLE ENERGY (BOL, AC kWh)	NOMINAL ENERGY (BOL, DC kWh)
NEO AiO 100 kW / 250 kWh	1127	100	250	280
NEO 100 kW / 500 kWh	1102	100	500	559
NEO 200 kW / 250 kWh - Power ¹	1103	200	244	252
NEO 200 kW / 500 kWh	1104	200	500	559
NEO 200 kW / 750 kWh	1105	200	750	839
NEO 200 kW / 1000 kWh	1125	200	1,000	1,118
NEO 250 kW / 500 kWh	1106	250	500	559
NEO 300 kW / 750 kWh	1107	300	750	839
NEO 300 kW / 1,000 kWh	1108	300	1,000	1,118
NEO 300 kW / 1,250 kWh	1109	300	1,250	1,398
NEO 300 kW / 1,500 kWh	1126	300	1,500	1,677
NEO 400 kW / 500 kWh - Power	1110	400	488	504
NEO 400 kW / 750 kWh	1111	400	750	839
NEO 400 kW / 1,000 kWh	1112	400	1,000	1,118
NEO 400 kW / 1,250 kWh	1113	400	1,250	1,398
NEO 400 kW / 1,500 kWh	1114	400	1,500	1,677
NEO 500 kW / 500 kWh - Power	1116	500	488	504
NEO 500 kW / 1,000 kWh	1118	500	1,000	1,118
NEO 500 kW / 1,250 kWh	1119	500	1,250	1,398
NEO 500 kW / 1,500 kWh	1120	500	1,500	1,677

¹: NEO 250 kW / 500 kWh system is a Derated AC output version of a 300 kW inverter station system

²: All the AC power ratings exclude the auxiliary power. All auxiliary circuits are powered by the PCS when in backup mode.
Combinations of the same systems above can be controlled in parallel to achieve larger systems sizes.


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