



PRODUCT PORTFOLIO

GUIDE TO SMARTER STORAGE & ENERGY EFFICIENCY.

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ABOUT US

WHAT WE DO

WHY US

COMMERCIAL SOLUTIONS

Kathea Energy was founded in 2016 and offers boutique, high-value-added distribution to manufacturers looking to make their mark in South Africa.

Kathea Energy remains privately owned, with >20 employees, headquartered in Johannesburg, and also has a presence in Cape Town and Port Elizabeth.

APPROACH

Kathea Energy only sells to EPCs and doesn't go directly to market, and it invests in high-calibre sales, pre-sales, and post-sales teams.

We prefer to represent fewer manufacturers to ensure we remain specialists in what we do.



Battery

Commercial BESS
with EMS



Panels

Top Tier
PV Panels



Inverters

Grid-Tied or Hybrid
or AC Coupled



Services

Support and
Commissioning

SERVICES

SERVICE OFFERINGS

BRANDS

BRANDS WE REPRESENT

COMMISSIONING

We offer commissioning services to our partners on containerised and non-containerised ESS solutions to ensure successful deployments.

FINANCE

In cooperation with our partner banks we enable our partners to offer monthly rental solutions to your corporate or homeowner clients. Separate application does apply.

SUPPORT

We are here to support products that you purchased products and fulfill manufacturer warranties. Ad hoc paid-for services are also available.

[SUPPORT PORTAL](#)



LITHIUMVALLEY

ENcombi



OVERVIEW



LUNA 1 - 4.5MW CONTAINERS

Huawei's LUNA containerised energy storage systems deliver powerful, scalable storage from 1MW to 4.5 MW, designed for large-scale commercial, industrial and utility applications.

- Up to 4.5MWh in a single container
- Integrated PCS, battery packs and EMS
- AI-powered active safety features
- Modular design for phased expansion

LUNA2000-215KWH COMMERCIAL BESS

LUNA2000-215kWh is a high-performance battery energy storage system built for medium to large-scale applications that demand reliability, safety, and smart energy management.

- Easily scalable for growing energy needs
- Compatible with PV and grid-tied systems
- Real-time monitoring with AI-powered diagnostics
- LFP cells + multi-layer protection

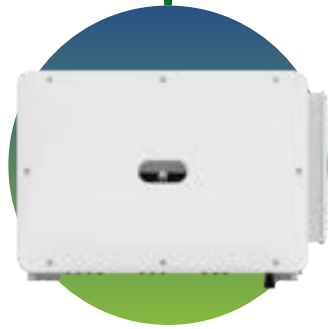


Huawei FusionSolar

GRID TIE INVERTERS

Huawei's Three-Phase Grid-Tied Inverters offer a powerful and reliable solution for commercial and industrial solar systems, with models ranging from 15kW to 330kW

- Up to 98.7% efficiency with multiple MPPTs
- Integrated with Huawei FusionSolar platform
- Advanced grid support functions
- IP66 rating, natural cooling



SMALL SCALE UTILITY

Huawei's small-scale utility solutions bridge the gap between C&I and full utility -scale, offering a robust, integrated package for projects in the 500kW to 10MW range

- Optimised system design (PV + Storage + Smart EMS integration)
- Industry-leading inverter efficiency and multi-MPPT
- Centralised monitoring, IV cure diagnosis, AI alerts
- Suitable for land-based, carport and hybrid deployments



CASE STUDY

PRODUCT CATALOGUE

LUNA BESS CONTAINERS

1MW



2MW



4.5MW



| | | | |
|-------------------------|-----------------------|--------------------------------|---|
| DC Rated Voltage | 1 250V | 1 250V | 1 331.2V |
| DC Max. Voltage | 1 500V | 1 500V | 1 500V |
| Nominal Energy Capacity | 1 016kWh | 2 032kWh | 4 472kWh |
| Container Configuration | | 6 058 x 2 896 x 2 438mm | |
| Container Weight | ≤ 20t | ≤ 30t | ≤ 41t |
| Operation Temp. Range | | ~30°C ~55°C | |
| Storage Temp. Range | | ~40°C ~60°C | |
| Cooling Method | Smart Air Cooling | Smart Air Cooling | Liquid Cooling |
| HVAC Configuration | 3 HVACs | 8 HVACs | |
| Fire Suppression Agent | FM~200 or Novec 1230™ | FM~200 or Novec 1230™ | Water Sprinkler, Novec 1 230 (Optional) |
| Comms Protocol | Modbus TCP / IEC 104 | Modbus TCP / IEC 104 | Modbus TCP |
| Protection Degree | | IP55 | |

GRID TIE INVERTERS

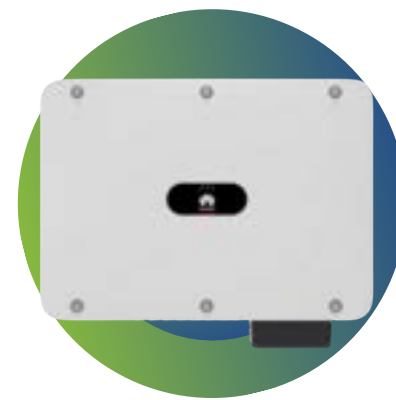
15KTL



20KTL



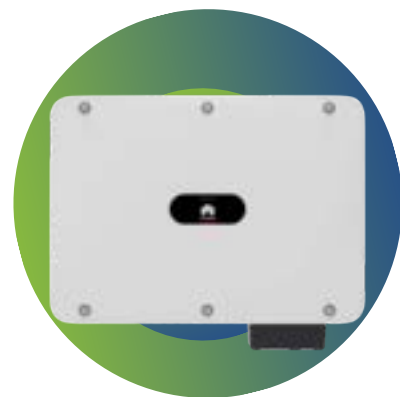
30/36/40KTL



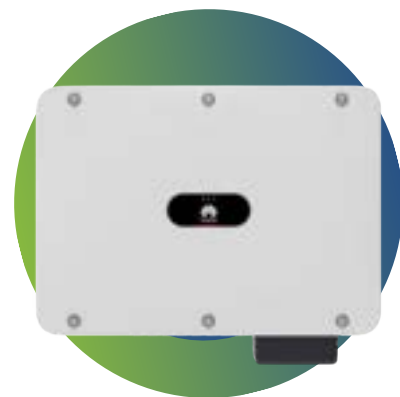
| | | | |
|------------------------------|-------------------|-------------------|--------------------|
| Max, Efficiency | 98.4% | 98.4% | 98.7% |
| Recommended Max PV Power | 22 500 Wp | 30 000Wp | - |
| Max. input voltage | - | - | 1100V |
| Full-load MPPT Voltage Range | 410C-800V | 440V-800V | - |
| MPPT Operating Voltage Range | - | - | 200V~1000V |
| Rated Output Power | 15 000 W | 20 000 W | 30 000- 40 000W |
| Max. Apparent Power | 16 500 VA | 22 000 VA | 33 000 - 44 000 VA |
| Rated AC Grid Frequency | 50/60 Hz | | |
| Dimensions | 546 x 460 x 228mm | 546 x 460 x 228mm | 640 x 530 x 270mm |
| Degree of Protection | IP66 | | |

GRID TIE INVERTERS

50KTL



100KTL



150KTL

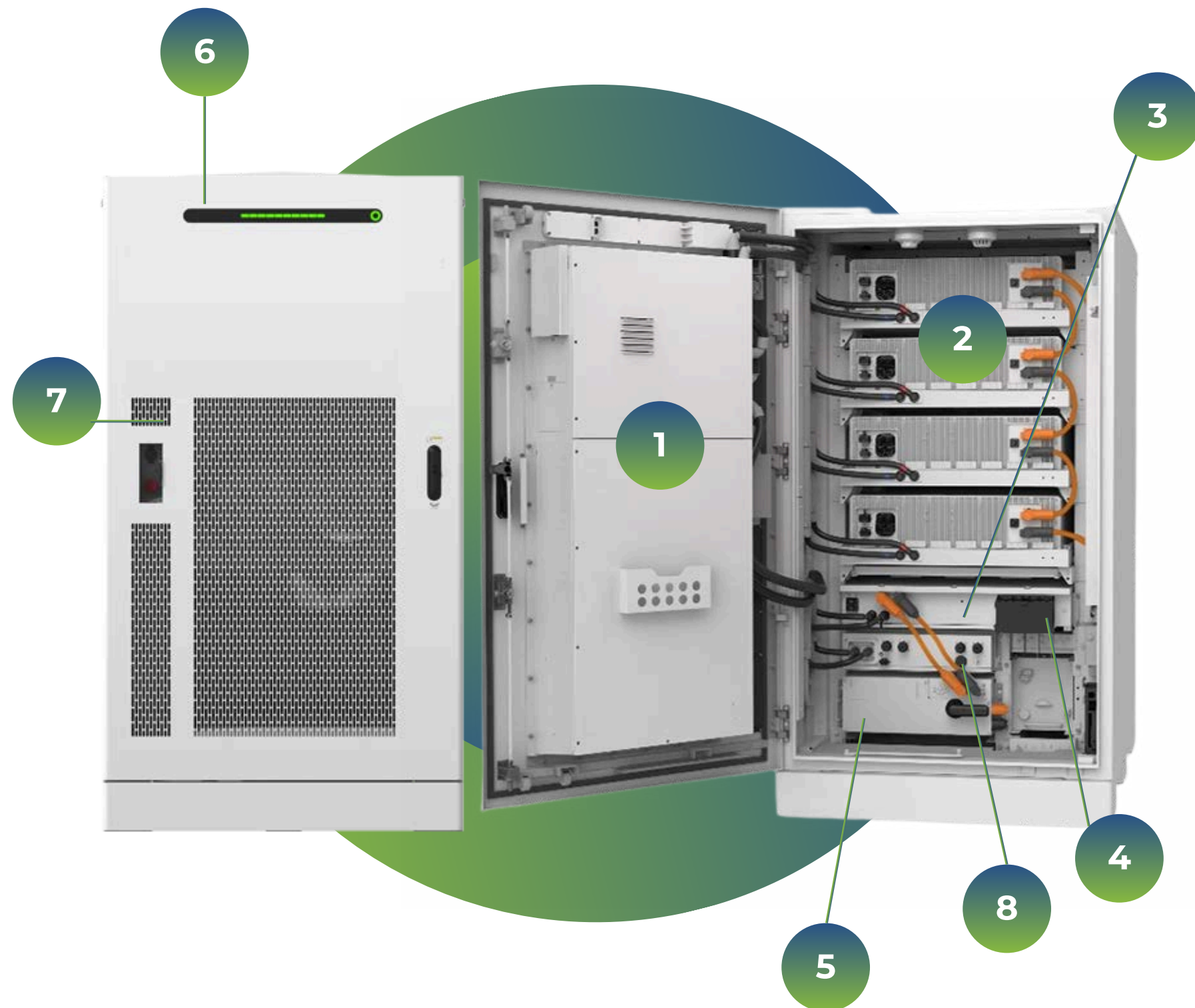


330KTL



| | | | | |
|------------------------------|-------------------|-------------------------|------------------------|--------------------|
| Max. Efficiency | 98.5% | 98.6%@400V, 98.8% @480v | 98.6%@400V, 98.8%@480V | >=99.03% |
| Max. input voltage | 1100 V | 1100 V | 1100 V | 1500 V |
| MPPT Operating Voltage Range | 200-1000V | 200-1000V | 200-1000V | 500~1500 V |
| Rated Output Power | 50000W | 100000W | 150000W | 330000W |
| Max. Apparent Power | 55000VA | 110000 VA | 165000VA | 330000VA |
| Rated AC Grid Frequency | | | 50/60 Hz | |
| Dimensions | 640 x 530 x 270mm | 1035 x 700 x 365mm | 1000 x 710 x 395mm | 1048 x 732 x 395mm |
| Degree of Protection | | | IP66 | |

LUNA-215 COMMERCIAL STORAGE CABINET



| | |
|-----------------------------|--|
| Rated Capacity | 215.0kWh |
| Maximum Cycle Rate | 0.5CP |
| Max. Cycle Efficiency | 91.3% |
| Operating Temperature Range | -30` C~55` C (>50` C Derating) |
| Storage Temperature Range | -35` C ~60` C |
| Operating Humidity Range | 0~100% (non-condensing) |
| Maximum Operating Altitude | 4 000m |
| System Temperature Control | Hybrid Cooling |
| Fire Suppression Mode | Directional gas exhaust, Top explosion vent, Aerosol |
| Communication Protocol | Modbus TCP |
| Protection Degree | IP55 |
| Noise (ROC) | 65dB (A) |

1. **Air-liquid intelligent cooling unit**
2. **Battery pack with optimizer 2.0 (53.8kW each)**
3. **Intelligent battery controller (108kW PCS)**
4. **AC output port**
5. **Rack Control Module**
6. **Audible and visual alarm, and running status display**
7. **Emergency stop switch**
8. **DC-DC module (optional for 480V)**

OVERVIEW



PCS (WITH ISOLATION TRANSFORMER)

MEGA series isolated energy storage converter is developed based on the application requirements of large C&I such as peak load shifting, battery backup, etc. It adopts full digital control technology, integrates the leading technological achievements of contemporary power electronics, and the highest efficiency of the product reaches 97.5%; Support multi-machine parallel function, can meet the power demand of 30KW~3MW.

- Safe and Reliable
- Flexible Configuration
- Intelligent and efficient



MPS (HYBRID INVERTER)

Megarevo MPS series hybrid inverters adopt an integrated design, integrating PV controllers, energy storage converters, and on/off-grid automatic switching units, greatly improving customer deployment efficiency and reducing installation costs. The PV capacity can be flexibly configured, greatly improving the microgrid system availability, and is suitable for remote areas and islands where power is relatively weak. Our microgrid inverter's strong load adaptability and complete protection function ensure power supply security and stability.

- Safe and Reliable
- Flexible Configuration
- Intelligent and efficient

[CASE STUDY](#)[PRODUCT CATALOGUE](#)

MEGAREVO



PCS (WITH ISOLATION TRANSFORMER)

50KW



100KW



150KW



250KW



500KW



| | | | | | |
|-------------------------------|---------------------|---------------------|---------------------|-----------------------|-------------------------|
| Voltage Range | 320~850 V | 420~850 V | 420~850 V | 420~850 V | 500~850 V |
| Max. Current | 178 A | 270 A | 405 A | 673 A | 1128 A |
| Max. Output Power (On-Grid) | 55 kW | 110 kW | 165 kW | 275 kW | 550 kW |
| Rated Output Power (On-Grid) | 50 kW | 100 kW | 150kW | 250 kW | 500 kW |
| Rated Current (On-Grid) | 72 A | 144 A | 216 A | 361 A | 722 A |
| Max. Output Current (On-Grid) | 80 A | 159 A | 238 A | 397 A | 794 A |
| Rated Frequency (On-Grid) | | | 50/60 Hz | | |
| Frequency Range (On-Grid) | | | 44~55/55~65 | | |
| Rated Voltage (Off-Grid) | | | 400 V | | |
| Rate Frequency (Off-Grid) | | | 50/60 Hz | | |
| Overload Capacity (Off-Grid) | | | 110% Long-Term | | |
| Max Efficiency | 96.5% | 97.1% | 97.1% | 97.3% | 97.5% |
| Ingress Protection | | | IP21 | | |
| Dimensions | 800 x 800 x 1 900mm | 800 x 800 x 1 900mm | 800 x 800 x 1 900mm | 1 200 x 800 x 2 050mm | 1 600 x 1 050 x 2 050mm |
| Weight | 712 | 936 | 1 057 | 1 582 | 2 665 |

MEGAREVO



MPS (WITH ISOLATION TRANSFORMER)

50KW



100KW



150KW



250KW



500KW



| | | | | | |
|------------------------------|-------|-----------|------------------------------|-----------|-----------|
| Max. Output Power (On-Grid) | 55 kW | 110 kW | 165 kW | 275 kW | 550 kW |
| Rated Output Power (On-Grid) | 50 kW | 100 kW | 150 kW | 250 kW | 500 kW |
| Rated Voltage (On-Grid) | 400 V | 400 V | 400 V | 400 V | 400 V |
| Voltage Range (On-Grid) | 3 | 320~460 V | 320~460 V | 320~460 V | 320~460 V |
| Rated Current (On-Grid) | | 144 A | 216 A | 361 A | 722 A |
| Rated Frequency (On-Grid) | | | 50/60 Hz | | |
| Frequency Range (On-Grid) | | | 45~55/55~65 | | |
| Power Factor (On-Grid) | 55 kW | | 1leading~1lagging (settable) | | |
| Max. Output Power (Off-Grid) | 50 kW | 110 kW | 165 kW | 275 kW | 550 kW |
| Rated Power (Off-Grid) | | 100 kW | 150 kW | 250 kW | 500 kW |
| Rated Voltage (Off-Grid) | | | 400 V | | |
| Rated Current (Off-Grid) | 72 A | 144 A | 216 A | 361 A | 722 A |
| THDu (Off-Grid) | | | <1% Linear, or 5% Nonlinear | | |
| Rated Frequency (Off-Grid) | | | 50/60 Hz | | |
| Overload Capacity (Off-Grid) | | | 110% Long-Term, 120% 1min | | |
| MPPT Module Quantity | 1/2 | 2/3//4 | 2/3/4 | 5/6 | 10/11/12 |
| MPPT Voltage Range | | | 250~850 | | |



OVERVIEW



CONTAINERISED C&I ESS

A turnkey solution for large-scale commercial and industrial energy needs. Housed in a fully integrated, transportable container, it combines high-capacity storage, advanced safety systems, and smart energy management, ideal for grid support, peak shaving, and backup power.



CASE STUDY

PRODUCT CATALOGUE

LITHIUM VALLEY

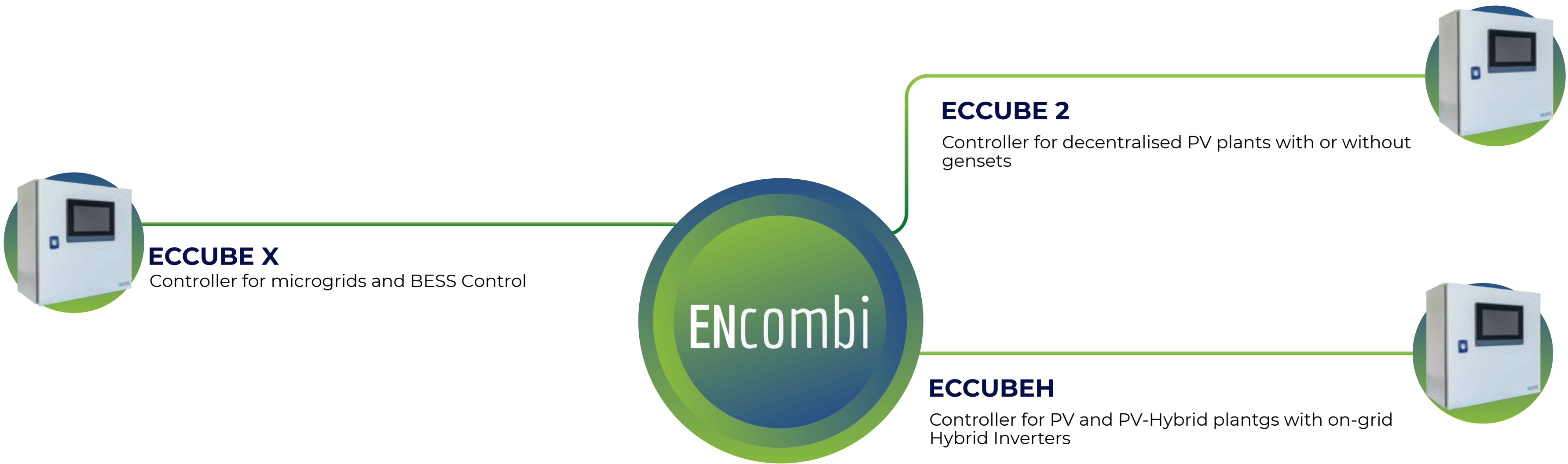
LITHIUM VALLEY

CONTAINERISED C&I ESS



This product is designed as the movable container, with its own energy storage system, compatible with photovoltaic and utility power, widely applicable to temporary power use, island application, emergency power supply, power preservation and backup.

| | |
|----------------------------|-------------------------|
| Capacity | 1 075 kWh |
| Rated AC Power | 500 kW |
| Max. Round-Trip Efficiency | 90% |
| Dimensions | 6 058 x 2 438 x 2 591mm |
| Cycle Life | >= 6 000 |
| IP Rating | IP54 |



ENCOMBI

ENERGY MANAGEMENT SYSTEMS

ENcombi

ECcube 2



| | |
|--------------|---|
| ECpv2 Logger | Logs data from utility, genset and PV inverters |
| ECpv2 Solar | Only PV control. Inverter power unlimited |
| ECpv2 S | PV/Genset. Inverter power up to 100kW |
| ECpv2 M | PV/Genset. Inverter power up to 500kW |
| ECpv2 L | PV/Genset. Inverter power unlimited |

ECcubeH



| | |
|--------------|--|
| ECpvH Logger | Logs data from utility, gensets and PV Inverters |
| ECpvH Solar | Only PV control. Inverter power unlimited |
| ECpvH S | PV/Genset. Inverter power up to 100kW |
| ECpvH M | PV/Genset. Inverter power up to 500kW |
| ECpvH L | PV/Genset. Inverter power unlimited |

ECcubeX



| | |
|--------------|---|
| ECpvX Logger | Logs data from utility, genset and PV inverters |
| ECpvX Solar | Power Plant Control for Solar and BESS |
| ECpvX S | Microgrid up to 100kW BESS and 100kW Inverter |
| ECpvX M | Microgrid up to 500kW BESS and 500kW PV Inverter |
| ECpvX L | Microgrid unlimited BESS and PV Inverter capacity |



ECpv variant of choice

ECcube is a plug-and-play control system for logging, power export and PV/genset control.

It covers applications from small kW and up to MW size plants.

It is IP66/65 with ECpanel7 and can be placed indoor or outdoor out of direct sunlight

Features

- ECpv controller
- 5 port LAN switch
- Breaker
- Power supply
- Terminals

Extra

- ECpanel7 7" touch screen
- 4G modem
- DNP3
- SNMP
- Surge protection
- Multiplexer for dual Modbus Master
- Digital input and outputs

OVERVIEW



OASIS L261 ALL-IN-ONE ESS

The OASIS L261 is a fully integrated 261kWh energy storage system designed for flexible deployment in commercial and industrial environments. It combines PV and storage integration to reduce solar curtailment and boost energy utilization, while enabling peak shaving by storing energy when prices are low and using it during peak hours. With built-in EMS and cloud platform support, it offers real-time monitoring, remote scheduling, and intelligent fault management. The system also supports microgrid applications and emergency backup power, ensuring energy continuity in critical scenarios.

SUNWODA
ENERGY

OASIS RACK PRO

The OASIS Rack Pro is a modular energy storage solution designed for seamless integration with external hybrid inverters and PV systems. Supporting DC coupling, it maximizes solar utilisation and minimises curtailment. Ideal for peak shaving and valley filling, it reduces electricity costs by shifting energy use to off-peak times. With cloud-based EMS for real-time monitoring and remote control, it enables efficient energy scheduling, microgrid applications, fast frequency response, and reliable emergency backup. Making it a smart choice for dynamic commercial and industrial energy needs.



OASIS 60

OASIS 60 is a fully integrated 60kW/215kWh energy storage system built for commercial and industrial applications. Combining a PCS, battery pack, EMS, and fire protection in one compact unit, it supports peak shaving, backup power, and renewable energy integration. With smart monitoring, modular design, and fast deployment, the OASIS 60 delivers reliable, space-efficient energy management for C&I facilities.

PRODUCT CATALOGUE

SUNWODA

OASIS RACK PRO

SUNWODA
ENERGY

107-215kWh

DC Side Parameter

| | |
|---------------------------------|----------------------|
| Cell Specification | 3.2V 280Ah |
| Cell Type | LFP |
| PACK Specification | 1P205, 64V, 17.92kWh |
| PACK Quantity | 6-12 |
| Rated Capacity | 107.52-215.04kWh |
| Rated Voltage | 384V - 768V |
| Voltage Range | 336-864V |
| Max. Charge and Discharge Ratio | 1C |

System Parameter

| | |
|-----------------------------|----------------------------|
| Communication Mode | CAN, RS485, Internet, WiFi |
| Cooling Method | Intelligent Air Cooling |
| Installation Method | Indoor |
| Protection Degree | IP20 |
| Operating Temperature Range | 0~+55°C (>45°C Derating) |
| Operating Humidity Range | 0~9555RH, non-condensing |
| Dimension(WxDxH) | 1160x976x2060mm |
| Weight | <2000kg |
| Certification | UN28.3, CE, IEC |



SUNWODA

OASIS 60

SUNWODA
ENERGY

HV 60 kWh

System Parameter

| | |
|---------------------------------|---|
| Battery Number | 12pcs |
| Rated Voltage | 614.4V |
| Voltage Range | 537.6~691.2V |
| Max. C-Rated | 1C |
| Rated Energy | 60kWh |
| Weight | 807kg |
| Dimensions (L x W xH) | 715 x 890 x 2140mm |
| Expansion | Supports up to 6 battery cabinets in parallel |
| Protection Level | IP55 |
| Temperature Control Method | Air-Conditioning |
| Ambient Temperature | -20~55°C |
| Recommended Storage Temperature | 20~30°C |
| Working Humidity | 10%~95% RH (without condensation) |
| Communication | CAN/RS485/WiFi |
| Warranty | 5years |
| Max. Working Altitude | 2000m |
| Cycle Life | 6000times(25°C ,0.5C/0.5C,90%DOD, EOL60%) |



SUNWODA

OASIS L261 ALL-IN-ONE



125kW/261kWh

DC Side

| | |
|----------------------|------------|
| Cell Type | LFP |
| Cell Specification | 3.2V 314Ah |
| PACK Capacity(kWh) | 52.2496 |
| Rated Capacity (kWh) | 261.248 |
| Rated Voltage | 832V |

AC Side (On-Grid)

| | |
|-------------------------|-------------------|
| Rated Output Power (kW) | 125 |
| THDi | <3% (Rated Power) |
| Rated Voltage(v) | 400 (300~440) |
| Rated Frequency(Hz) | 50/60Hz (+-2.5Hz) |
| Power Factor | -1~+1 |

AC Side (Off-Grid, Optional STS Module)

| | |
|-----------------------------|-------------------|
| Rated Output Power (kW) | 125 |
| Wiring Method | 3L+N |
| Rated Output Voltage (V) | 400 |
| Rated Output Frequency (Hz) | 50/60 |
| THDu | <3% (Linear Load) |

System Parameter


| | |
|-------------------------|----------------------------|
| Communication Interface | CAN, RS485, Internet, WiFi |
| Cooling Mode | Liquid Cooling |
| Installation Mode | Outdoor |
| Protection Grade | IP55 |
| Ambient Temperature | -30~+55°C (>45°C Derating) |
| Ambient Humidity | 5%~95%, No Condensation |
| Altitude | 2000m |
| Size (W x D x H) | 980 x 1390 x 2350mm |
| Weight | <2400kg |



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