Omnispower®
EUROPE

CATALOG



INNOVATION AND COMPETITIVENESS. ALWAYS

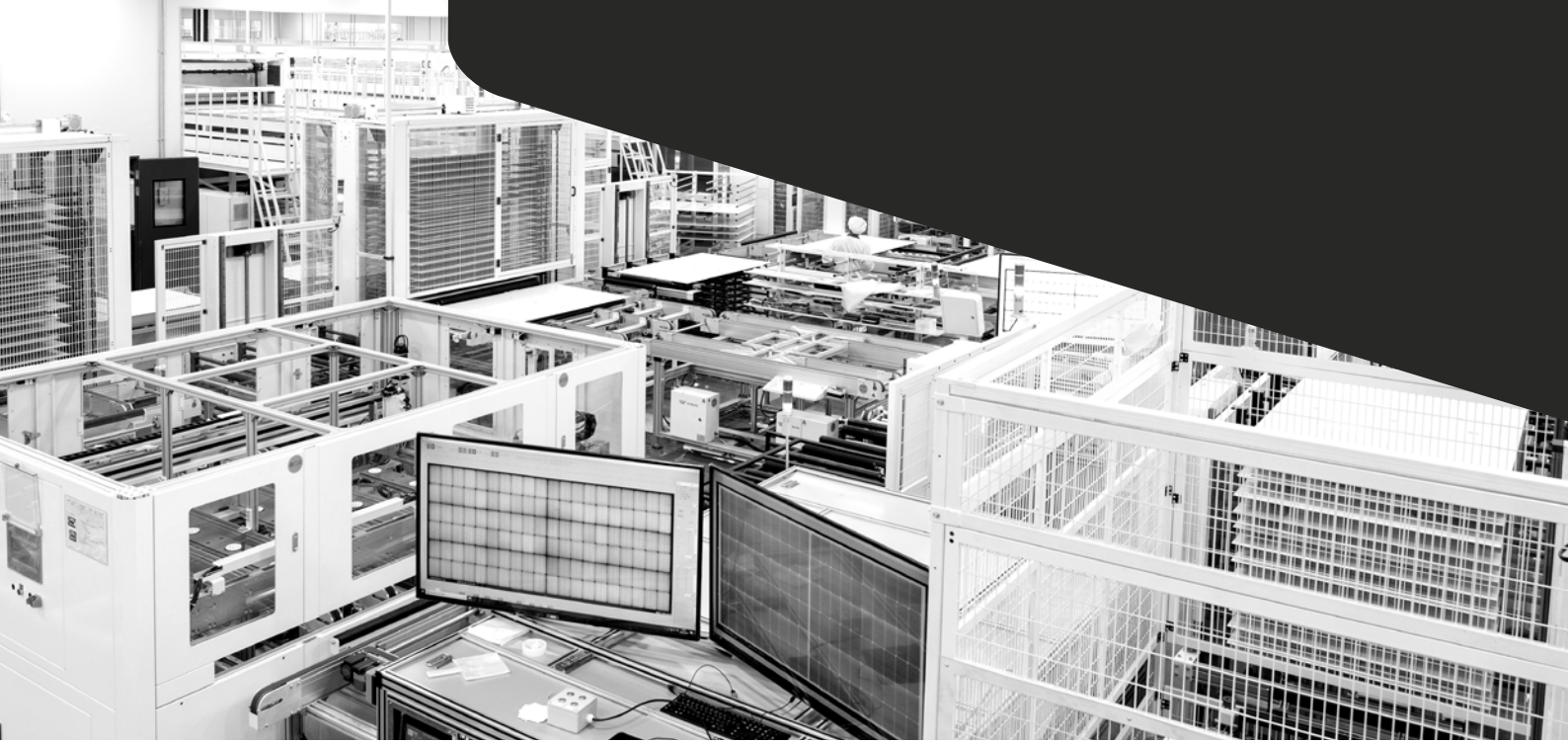
COMMON GOAL

Omnis Power was founded in 2010 by a group of entrepreneurs with experience in the energy sector and a common idea: to innovate the renewable energy sector.
Arising from several spin-offs of leading companies in the industry, Omnis Power is at the forefront of new technology research and competitive product development.

EUROPEAN GROUP

Today, Omnis Power is a European company with international experience that believes and invests in Europe. The increasingly strong group already has offices in Italy, Lithuania, Estonia, Germany and Norway in addition to numerous partners around the world.





40.000MQ
Total logistics warehouse areas in Europe

25.000MQ
Total production areas in Europe

1000+
Omnis Power staff

ITALIA

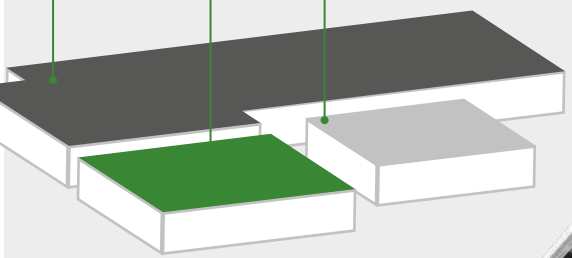
Production of photovoltaic panels

LITUANIA

Inverter and battery production

Guardabosone (VC)
Building: 12,000 m²

Prodution	Offices	Logistics	External logistics
8,000 m²	850 m²	3.000 m²	100.000 m²







PRICE
RELIABILITY
EFFECTIVENESS

MARKET STRATEGY

Omnis Power's market strategy is clear. The unique supply chain and constant research allow competitive prices, guarantee reliability and the highest quality as well as accurate, punctual and effective service.



COMPETITIVE PRICE



CONSTANT RESEARCH AND INVESTMENT



CONTINUOUS ASSISTANCE



QUALITY ASSURANCE AND CONTROL

30-YEAR WARRANTY

Quality control is rigorous at every stage of production; we use the most advanced testing methods, verifying each panel to international highest quality standards in the world. Thanks to this process, Omnis Power provides a long-term guarantee, with a 30-year warranty on materials and production efficiency.





ON-GOING QUALITY CONTROL

CONTINUOUS COLLABORATIONS



From incoming material tests to online production, from OBA (Open Box Audit) tests to delivery status, the ERP (Business Management) system created by Omnis Power combines all data in one database for complete traceability.

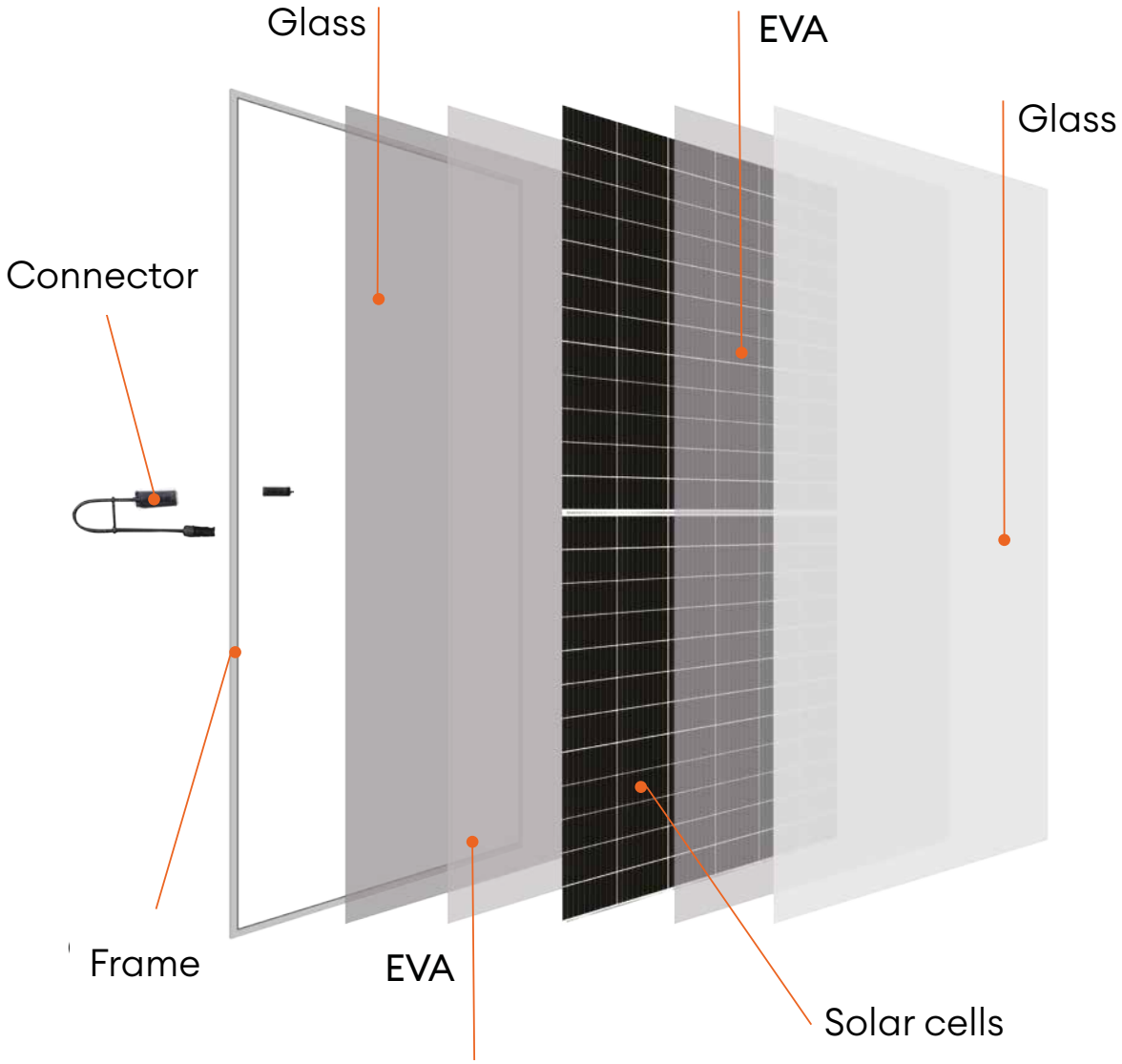
All information such as raw material suppliers, production personnel, quality test results and production details are available online through our ERP system. This data is stored on our server for customer access and allows us to track and take responsibility for monitoring the entire product cycle and optimising the production process.

QUALITY MANAGEMENT SYSTEM

Omnis Power has obtained Quality Management System (ISO 9001:2015), Environmental Management System (ISO 14001:2015) and Occupational Health and Safety Management System (ISO 45001:2018) certificates from DNV and GZCC.

Omnis Power also meets the national criteria for performance excellence GB/T19580-2012, which regulate not only product quality, but also production waste, environmental load and management foresight.

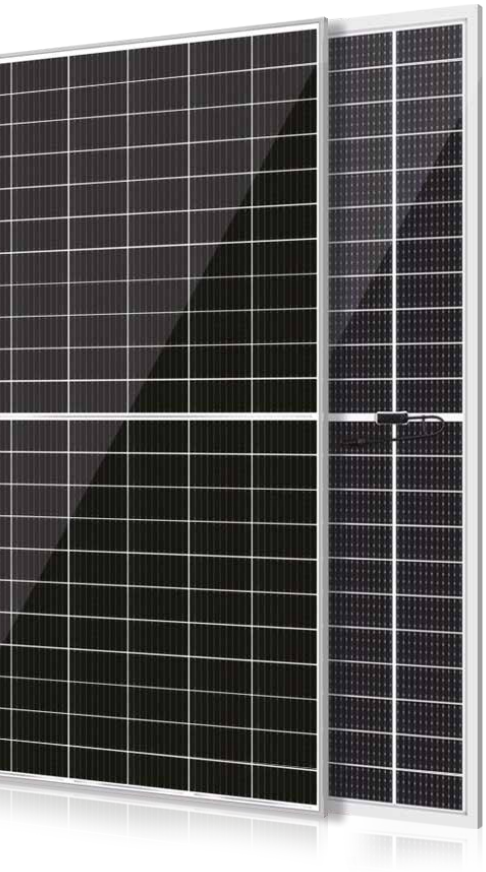
TECHNOLOGY PARTNERS AND SUPPLIERS



FOR ALL REQUIREMENTS

WIDE RANGE

Omnis Power offers a variety of products integrating silicon wafers with double-sided cells, multi-bus strips, high-density encapsulation and other related technologies. With years of investment in research and development, Omnis Power innovates and continues to provide highly competitive and valuable products to customers.



HIGH EFFICIENCY

Maximised output in less space

LIMITED EFFICIENCY LOSS

Guaranteed 0.4%/year on production

EXTENDED WARRANTY

30-year warranty on materials and production efficiency

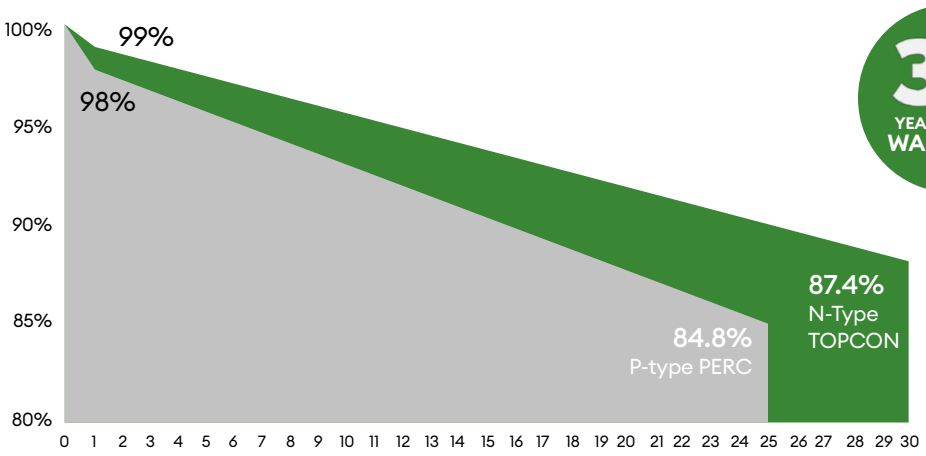
DURABILITY UNDER EXTREME CONDITIONS

Tested positive for resistance to salinity, ammonia and mechanical load

QUALITY AND EFFICIENCY

The efficiency of the photovoltaic panel is an important factor in the long-term performance of the system. More efficient photovoltaic panels are often also more reliable and durable, which translates into lower maintenance and replacement costs over the life of the system.

LONG WARRANTY PERIOD - MODULE EFFICIENCY







INNOVATIVE TECHNOLOGIES

Omnis Power constantly invests in research and development in pursuit of the best quality and highest efficiency.

PERC

Passivated **E**mitter and **R**ear **C**ell

- PERC technology refers to a new solar cell architecture.
- It improves absorption of the light spectrum near the rear surface of the cells.
- The main advantage is that it allows manufacturers to achieve higher efficiencies than standard solar cells.

N-TYPE TOPCON

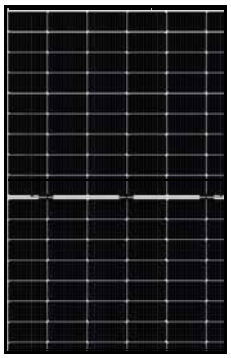
Tunnel **O**xide **P**assivated **Con**tact

- Topcon's N-Type technology generates a flow of free electrons that increases the efficiency of the modules.
- Better temperature coefficient (with a coefficient at -0.30%/°C, power generation performance is particularly outstanding at high temperatures. (0.75% higher than PERC).)
- Power gain with bifaciality (2% more than PERC due to the increase of the bifacial factor by 15%. The power guarantee can be up to 30 years. The degradation in the first year is less than 1%, which means that the power output at year 30 is at least 87.4% guaranteed).

SHINGLED

- Less energy loss due to shading.
- The configuration of the solar cells in shingles allows for group wiring and parallel configuration, which significantly reduces losses caused by shading.
- A new position of the photovoltaic cells reduces the space between them, allowing more cells to be placed on each solar panel. The innovatively designed Shingled solar module improves efficiency and safety: it reduces costs and offers a sophisticated solution that optimises aesthetics and functionality.
- Attractively designed panels for new perspectives.

NORDIKA SERIES



NT5 N-TYPE 420W/440W BIFACIAL ULTRA BLACK

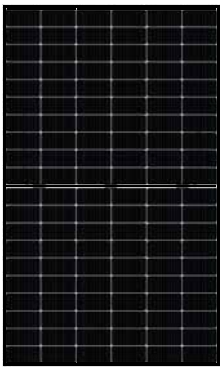
NT5 N-Type 430W ANTI-HAIL CERTIFIED PANELS

Electrical Data (STC)

	OP420M54-NT5-BF	OP425M54-NT5-BF	OP430M54-NT5-BF	OP435M54-NT5-BF	OP440M54-NT5-BF
Panel Efficiency (%)	21.5	21.8	22.0	22.3	22.5

Mechanical Data

Panel Dimension (H/W/0)	1722 x 1134 x 30 mm
Weight	24.2kg
Cell Type	108 cells, N-Type Monocrystalline 182x91 mm



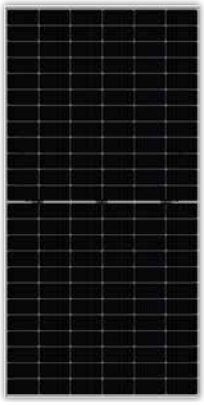
NT5 N-TYPE 465W/485W BIFACIAL ULTRA BLACK

Electrical Data (STC)

	OP465M60-NT5-BF	OP470M60-NT5-BF	OP475M60-NT5-BF	OP480M60-NT5 BF	OP485M60-NT5-BF
Panel Efficiency (%)	21.6	21.8	22.0	22.2	22.5

Mechanical Data

Panel Dimension (H/W/0)	1903 x 1134 x 30 mm
Weight	26.3kg
Cell Type	120 cells, N-Type Monocrystalline 182x91 mm



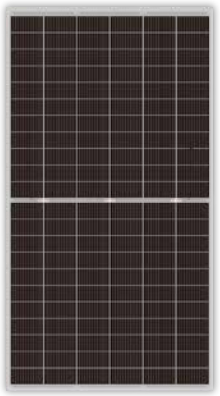
NT5 N-TYPE 560W/580W BIFACIAL SILVER FRAME

Electrical Data (STC)

	OP560M72-NT5-BF S	OP565M72-NT5-BF S	OP570M72-NT5-BF S	OP575M72-NT5-BF S	OP580M72-NT5-BF S
Panel Efficiency (%)	21.7	21.9	22.1	22.3	22.5

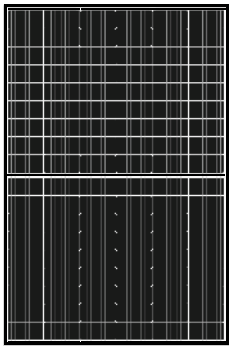
Mechanical Data

Panel Dimension (H/W/0)	2278 x 1134 x 30 mm
Weight	32.3kg
Cell Type	144 cells, N-Type Monocrystalline 182x91 mm



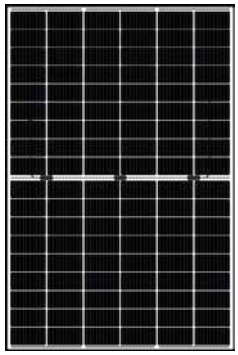
NT5 N-TYPE 675W/690W BIFACIAL SILVER FRAME

Electrical Data (STC)				
	OP675M66-NT5-BF S	OP680M66-NT5-BF S	OP685M66-NT5-BF S	OP690M66-NT5-BF S
Panel Efficiency(%)	21.7	21.9	22.1	22.2
Mechanical Data				
Panel Dimension(H/W/0)	2384 x 1303 x 35 mm			
Weight	38.8kg			
Cell Type	132 cells, PERC Monocrystalline 210x105 mm			



P5 PERC 400W/415W MONOFACIAL FULL BLACK

Electrical Data (STC)				
	OP400M54-P5-M	OP400M54-P5-M	OP400M54-P5-M	OP400M54-P5-M
Panel Efficiency (%)	20.5	20.7	21.0	21.3
Mechanical Data				
Panel Dimension (H/W/0)	1172 x 1134 x 30 mm			
Weight	21.5kg			
Cell Type	108 cells, PERC Monocrystalline 182x91 mm			



P5 PERC 400W/415W BIFACIAL FULL BLACK

Electrical Data (STC)				
	OP400M54-P5-BF	OP400M54-P5-BF	OP400M54-P5-BF	OP400M54-P5-BF
Panel Efficiency (%)	20.5	20.7	21.0	21.3
Mechanical Data				
Panel Dimension (H/W/0)	1172 x 1134 x 30 mm			
Weight	24.2kg			
Cell Type	108 cells, PERC Monocrystalline 182x91 mm			

ALL IN ONE

HIGH PERFORMANCE

- 150% PV over management
- Backup overload capacity
- Max. efficiency 97.5%, Battery efficiency 98%
- Load monitoring accuracy
- Charging/Discharging Power 5kW/11kW

HIGH RELIABILITY

- UPS level redundant protection against backup load breakdown
- Three-level firmware and two-level hardware battery protection
- Multiple temperature monitoring, delicate thermal management

HIGH INTELLIGENCE

- Internal EMS optimizes home energy supply automatically
- PV production forecast
- Built-in electric power service, FCAS, VPP, etc.
- Online monitoring, online diagnosis, online service



OP-1PL-5KW-10KWH



OP-3PH-10KW-20KWH

Parameters	OP-1PL-5KW-10KWH	OP-3PH-10KW-20KWH
Nominal Output Power to Grid	5KWA	10KWA
Nominal Output Power	5KWA	10KWA
Max.Efficiency	97%	97,5%
Battery Working Voltage Range	40V-58V	150-550V
Max.Charging/Discharging Power	5kW	11kW
Rated.Charging/Discharging Current	95A	45A
Battery Type	Lithium iron phosphate (LFP)	Lithium iron phosphate (LFP)
Rated energy (kwh)	10.24kwh	20.48kwh
Module parameters	51.2V100Ah (16S1P)/5.12kwh	102.4V50Ah (32S1P)/5.12kwh
Module weight	60kg	55kg
Weight	180kg /Overall weight	310kg /Overall weight
Size	540mm*240mm*1710mm/(W*T*H)	680mm*290mm*1850mm/(W*T*H)
Standard Cycle	6000 Cycle	6000 Cycle
Ingress Protection	IP65	IP65
Certification	CEI 0-21	CEI 0-21

POWERCORE HOME





ELECTRICAL CHARACTERISTICS (HIGH VOLTAGE SERIES)

Model	PowerCore Home-HV10	PowerCore Home-HV15	PowerCore Home-HV19	PowerCore Home-HV23
Battery Type	LFP	LFP	LFP	LFP
Rated Voltage	230.4V	307,2V	348V	460,8V
Rated Energy	11.52kWh	15.36kWh	19.2kWh	23.04kWh
Dimensions (W*D*H)	635*335*565mm	635*335*710mm	635*335*855mm	635*335*1000mm
Weight	130.5kg	170kg	209.5kg	249kg
Communication interface	CAN/RS485			
IP Rating	IP65			
Cycle life	8000 cycles			
Warranty	10 years			

ELECTRICAL CHARACTERISTICS (LOW VOLTAGE SERIES)

Model	PowerCore Home-LV05	PowerCore Home-LV10	PowerCore Home-LV15	PowerCore Home-LV20
Rated Voltage	51.2V	51.2V	51.2V	51.2V
Rated Energy	11.52kWh	15.36kWh	19.2kWh	23.04kWh
Dimensions (W*D*H)	665*200*503mm	665*200*771mm	665*200*1039mm	635*335*1000mm
Weight	130.5kg	170kg	209.5kg	249kg
Communication interface	CAN/RS485			
IP Rating	IP65			
Cycle life	8000 cycles			
Warranty	10 years			

POWERCORE ULTRA

Economical and efficient
All-in-one solution: battery block, load controller, highly efficient three-level topology BMS and PCS integrated in one device to ensure maximum system efficiency. Series connection of one group without loss in parallel connection.

Safe and reliable
Standard cabinet with fire insulation system, unmatched cooling by liquid, combustible material detection technology and FM200 fire extinguishing system ensure safety and good controllability.

Smart and simple to use
Suitable for various purposes. Compatible with 400V mains systems. Supports peak reduction, demand management, standby power, frequency regulation, fault monitoring, and logging functions. Working data can be accessed via Wi-Fi connection, 5G, LAN, and other interfaces that allow the equipment to operate in automatic mode.

Easy to install
Ready-to-use self-installation solution (plug-and-play).
Flexible expansion options to meet all energy needs.



POWERCORE UTILITY

Safety and reliability
Precise thermal management ensures the stability of the battery system. Multi-level battery protection from cell to whole system and modular system ensures maximum safety. The disengagement lever system of the battery allows setting, turning on, and turning off the pre-alarm according to IP 55 and provides C4 corrosion protection.

Efficiency and flexibility
High battery efficiency and longer life thanks to one of the best liquid cooling technologies on the market. Extremely flexible possibilities according to the customer's needs.

Profitability
Integrated ESS for easy installation, start of operation, and maintenance. High availability and efficiency, which determine the economic operation of the system.

Smart and powerful
A combination of robust construction and smart features ensures maximum availability and efficiency. The smart control system provides information about the working condition.



BATTERY STACK

Reliable
Lithium ferro-phosphate (LFP) for long-term cycles. Cycle time: ≥ 8000. Compact structure leading to higher energy density.

Safe
Liquid cooling. Due to the unique construction of the liquid cells, a temperature difference of no more than 2°C is maintained between the cells. Even thermal distribution ensures maximum performance.

Smart
Suitable for inverter with operating voltage from 600 to 1500 volts. Integrated with patented BMS system, monitors the battery condition in real-time.

Simple
Modular construction; simple and quick installation due to the self-installation (plug-and-play) principle.
Flexibility and expandability to meet all energy needs.



POWERCORE MEGA

Safety and reliability
Precise thermal management ensures the stability of the battery system. Multi-level battery protection from cell to whole system and modular system ensures maximum safety.
Disengagement lever. IP54 and C4 corrosion protection class.

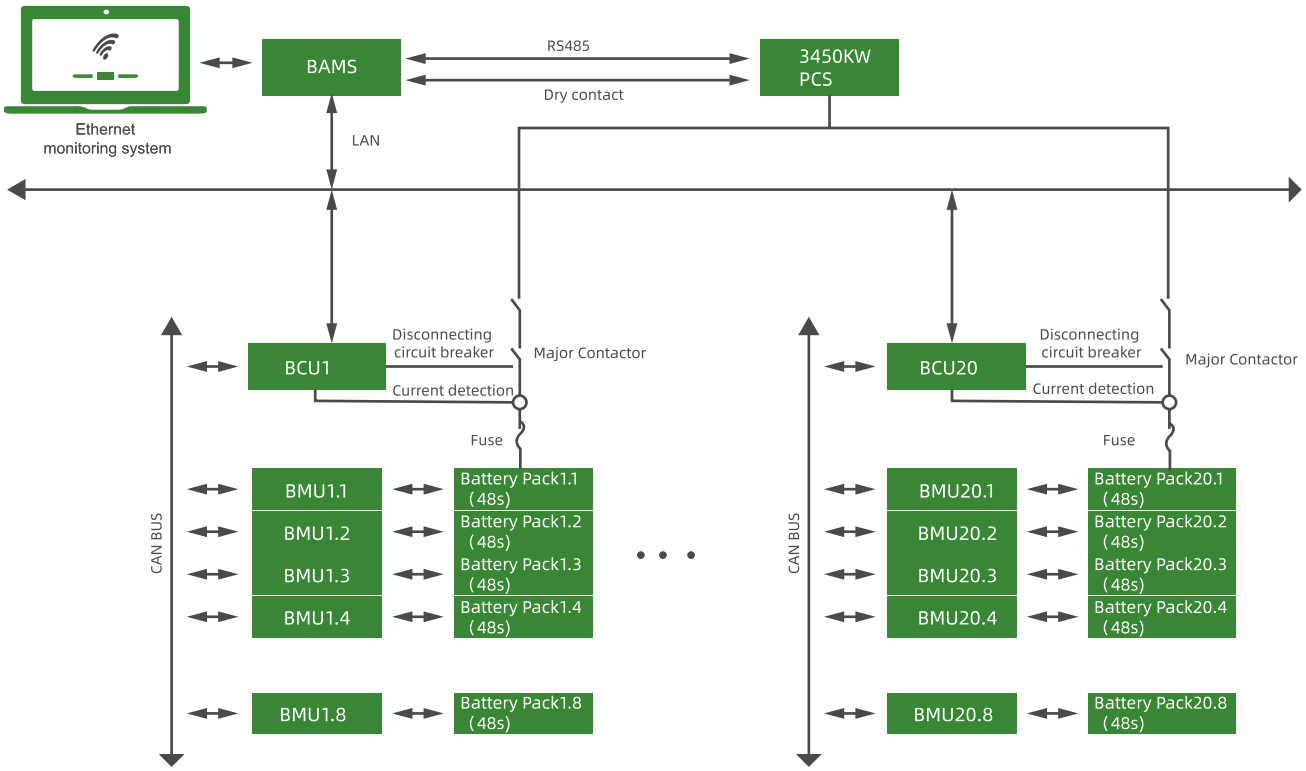
Cost effectiveness
Integrated ESS for easy installation, start of operation, and maintenance. Continuous availability and efficiency make the system economical to operate.

Efficiency and flexibility
High battery efficiency and longer life thanks to one of the best liquid cooling technologies on the market.
Maximum level switching capabilities due to parallel connection.

Smart and powerful
A combination of robust construction and smart features ensures maximum availability and efficiency. The smart control system provides information about the working condition.



BMS



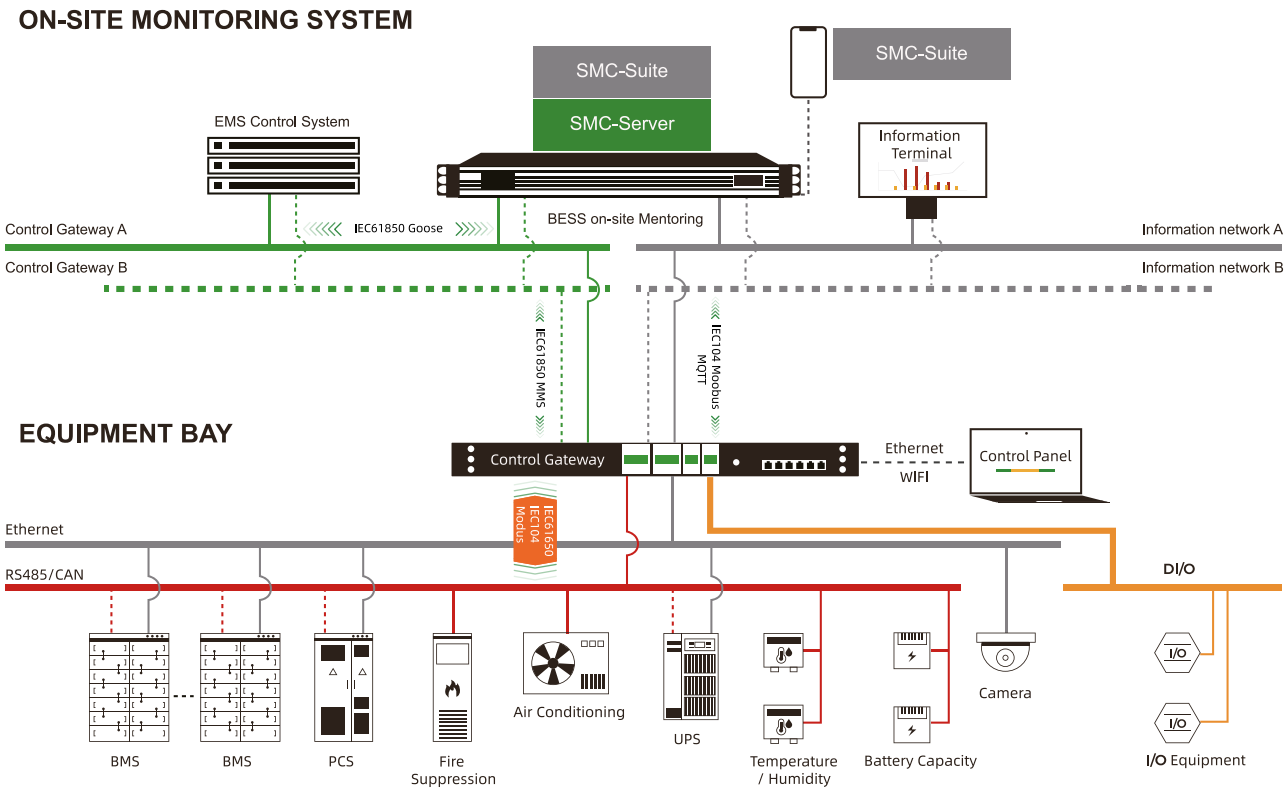
Perform Diagnosis
Monitors cell-to-cell variations over time; diagnoses errors, detect safety risks, and sends warning signals Real time monitoring and self-diagnostics
Records the pack's and the individual's cell signals; stores data related to the battery's life cycle history

Control Operating Conditions
Measures voltage, current, and temperature signals and controls these parameters to achieve cell balance and prevent damage to the battery
Multi-level protections at cell level and battery system level

Lifetime Optimization
Intelligent balancing and SOC algorithms enabled by high speed and accurate measurements
Synchronized measurements of current, temperature and voltage ensure a precise status of each individual cell

Estimate Parameters
Determines cell and pack levels such as State of Charge (SOC) and State of Health (SOH); communicates with controllers for cell balancing

EMS ENERGY MANAGEMENT SYSTEM



Intelligent and flexible
Supports monitoring of multiple complementary systems such as power source, grid, load, and energy storage
Supports fast switching between multiple modes such as solar-charging and storage, grid-connection, and off-grid, and has black-start capability
Integrated with fiber optic switches, enabling multiple networking configurations and flexible convenience

Safe and reliable
Equipped with intrusion detection, vulnerability scanning, DDOS protection, and virus immunity
System operating logs are traceable
Supports massive data storage

Simple and efficient
Supports comprehensive management of megawatt-level energy storage systems
Supports seamless integration with power grid dispatching and third-party monitoring systems
Has big data analysis and computing capabilities, with SOC automatic maintenance control

INVERTER



HYBRID S SERIES

Model	Omnis S-3000LV	Omnis S-3680LV	Omnis S-4600LV	Omnis S-5000LV	Omnis S-6000LV
Battery type			Li-ion/lead-acid		
Rated Battery Voltage (V)			48		
Voltage Range (V)			40-60		
Number of MPPTs	1	2	2	2	2
Max n. of PV String per MPPT	1/1	1/1	1/1	1/1	1/1
Max PV Input Current (A)	14/14	14/14	14/14	14/14	14/14
Max efficiency	97,6%	97,6%	97,6%	97,6%	97,6%
Dimension (W*H*D)			502x461x202mm		
Weight			25kg		
User Interface			LED/APP		
Protection Degree			IP65		



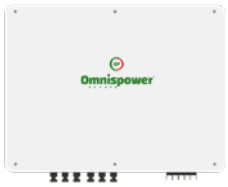
HYBRID T SERIES

Model	Omnis T-5000HV	Omnis T-6000HV	Omnis T-8000HV	Omnis T-10000HV	Omnis T-12000HV
Battery type			Li-ion		
Rated Battery Voltage (V)			500		
Voltage Range (V)			170-600		
Number of MPPTs	2	2	2	2	2
Max n. of PV String per MPPT	1/1	1/1	1/1	1/2	1/2
Max PV Input Current (A)	14/14	14/14	14/14	14/28	14/28
Max efficiency	97,6%	97,6%	97,6%	97,6%	97,6%
Dimension (W*H*D)			502x486x202mm		
Weight			26kg		
User Interface			LED/APP		
Protection Degree			IP65		



ON-GRID PCO 3-15KW

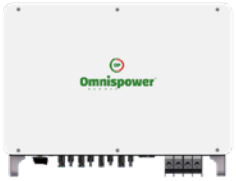
Model	PCO 3KTR	PCO 4KTR	PCO 5KTR	PCO 6KTR	PCO 8KTR	PCO 9KTR	PCO 10KTR	PCO 11KTR	PCO 12KTR	PCO 15KTR1
Max Input Power	4.8kW	6.4kW	8kW	9.6kW	12.8kW	14.4kW	16kW	17.6kW	19.2kW	24kW
Max Input Voltage	1100V									
Rated Input Voltage	600V									
N. MPP Trackers	2									
N. String per MPPT	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/2
Max Current per MPPT	14A/14A	14A/14A	14A/14A	14A/14A	14A/14A	14A/14A	14A/14A	14A/14A	14A/14A	14A/28A
Rated Grid Frequency	50Hz / 60 Hz									
Max Efficiency	98.4%	98.4%	98.4%	98.4%	98.7%	98.7%	98.7%	98.7%	98.7%	98.7%
Communications	Standard: RS485 / USB - Optional: WiFi / GPRS / Ethernet									
Dimensions (W*H*D)	481x395x195mm									
Weight	12kg	12kg	12kg	12kg	13.5kg	13.5kg	13.5kg	13.5kg	13.5kg	13.5kg
Pretection Degree	IP66									



ON-GRID PCO 15-25KW

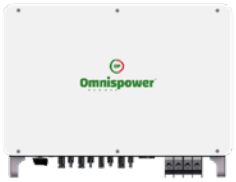
Model	PCO 15KTR	PCO 17KTR	PCO 20KTR	PCO 22KTR	PCO 25KTR
Max Input Power	24kW	27.2kW	32kW	35.2kW	40kW
Max Input Voltage	1100V				
Rated Input Voltage	600V				
N. MPP Trackers	2				
N. String per MPPT	2/2	2/2	2/2	2/2	2/3
Max Current per MPPT	26A	26A	26A	26A	26A/39A
Rated Grid Frequency	50Hz / 60 Hz				
Max Efficiency	98.40%				
Communications	Standard: RS485 / USB - Optional: WiFi / GPRS / Ethernet				
Dimensions (W*H*D)	534x440x220mm				
Weight	24kg				
Pretection Degree	IP66				

INVERTER



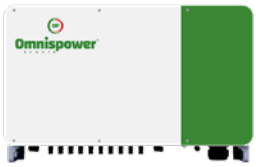
ON-GRID PCO 25-40KW

Model	PCO 25KTR-3M	PCO 30KTR	PCO 33KTR	PCO 36KTR	PCO 405KTR
Max Input Power	40kW	48kW	52.8kW	57.6kW	64kW
Max Input Voltage	1100V				
Rated Input Voltage	600V				
N. MPP Trackers	3	3	3	4	4
N. String per MPPT	2	2	2	2	2
Max Current per MPPT	26A				
Rated Grid Frequency	50Hz / 60 Hz				
Max Efficiency	98.60%				
Communications	Standard: RS485 / USB - Optional: WiFi / GPRS / Ethernet				
Dimensions (W*H*D)	600x430x230mm				
Weight	30kg				
Pretection Degree	IP66				



ON-GRID PCO 50-75KW

Model	PCO 50KTR	PCO 50KTRL	PCO 60KTR	PCO 60KTRL	PCO 66KTRL	PCO 70KTRL
Max Input Power	80kW	80kW	96kW	96kW	105.6kW	112kW
Max Input Voltage	1100V					
Rated Input Voltage	600V	600V	600V	600V	700V	700V
N. MPP Trackers	4					
N. String per MPPT	3/2/3/2			3/3/3/3		
Max Current per MPPT	39A/26A/39A/26A			39A		
Rated Grid Frequency	50Hz / 60 Hz					
Max Efficiency	98.70%					
Communications	Standard: RS485 / USB - Optional: WiFi / GPRS / Ethernet					
Dimensions (W*H*D)	650x450x260mm					
Weight	50kg					
Pretection Degree	IP66					



ON-GRID PCO 100-136KW

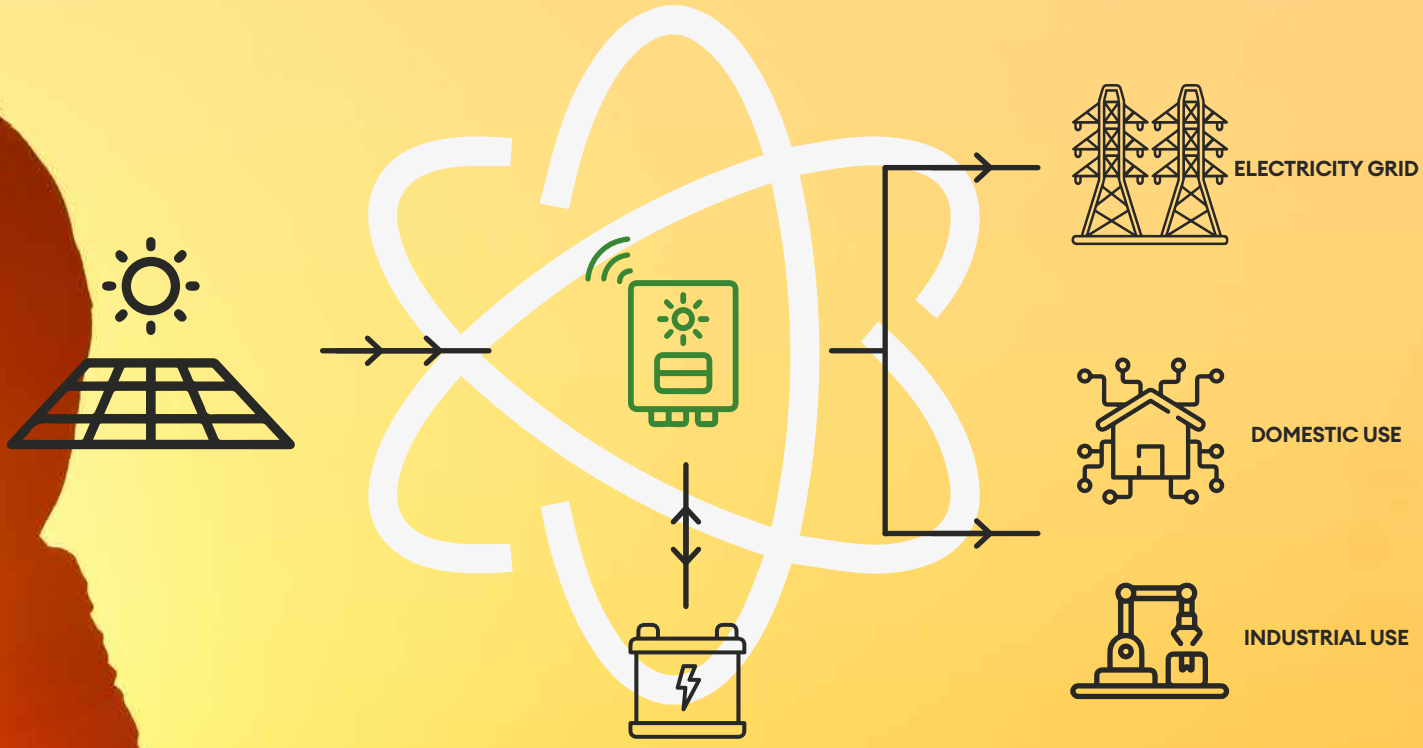
Model	PCO 100KTR	PCO 100KTR-F	PCO 110KTR	PCO 110KTR-F	PCO 136KTR-L	PCO 136KTR-LF	PCO 136KTR-X	PCO 136KTR-XF
Max Input Power	150kW					160kW		
Max Input Voltage	1100V							
Rated Input Voltage	530V-850V					560V-850V		
N. MPP Trackers	9	9	10	10	12	12	12	12
N. String per MPPT	2							
Max Current per MPPT	26A	30A	26A	30A	26A	30A	26A	30A
Rated Grid Frequency	50Hz / 60 Hz							
Max Efficiency	98.7%							
Communications	Standard: RS485 / USB - Optional: WiFi / GPRS / Ethernet							
Dimensions (W*H*D)	1050x660x330mm							
Weight	95kg	95kg	98kg	98kg	101kg	101kg	101kg	101kg
Pretection Degree	IP66							



THE MARKET REVOLUTION

We believe in technology that can combine the opportunities of hyperconnectivity and the cloud with a new, more efficient idea of energy that respects the environment in which our children will live.

Omnis Power's commitment is not limited to the production of 'hardware' technologies such as solar panels, batteries and inverters. By collaborating with universities and technology development companies, the development of new technologies will, in the short term, radically revolutionise the market.



SYSTEM INTEGRATOR

An extremely advanced system designed to assist and independently manage photovoltaic systems of households, energy communities and industrial plants, drastically reducing human intervention.

...imagine having a system that can predict the comfort of your home or office. That can read the weather, know and compare energy prices on the market to store energy at the most opportune times.
Active artificial intelligence is just around the corner to make your life easier and save you money.

EN Version

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