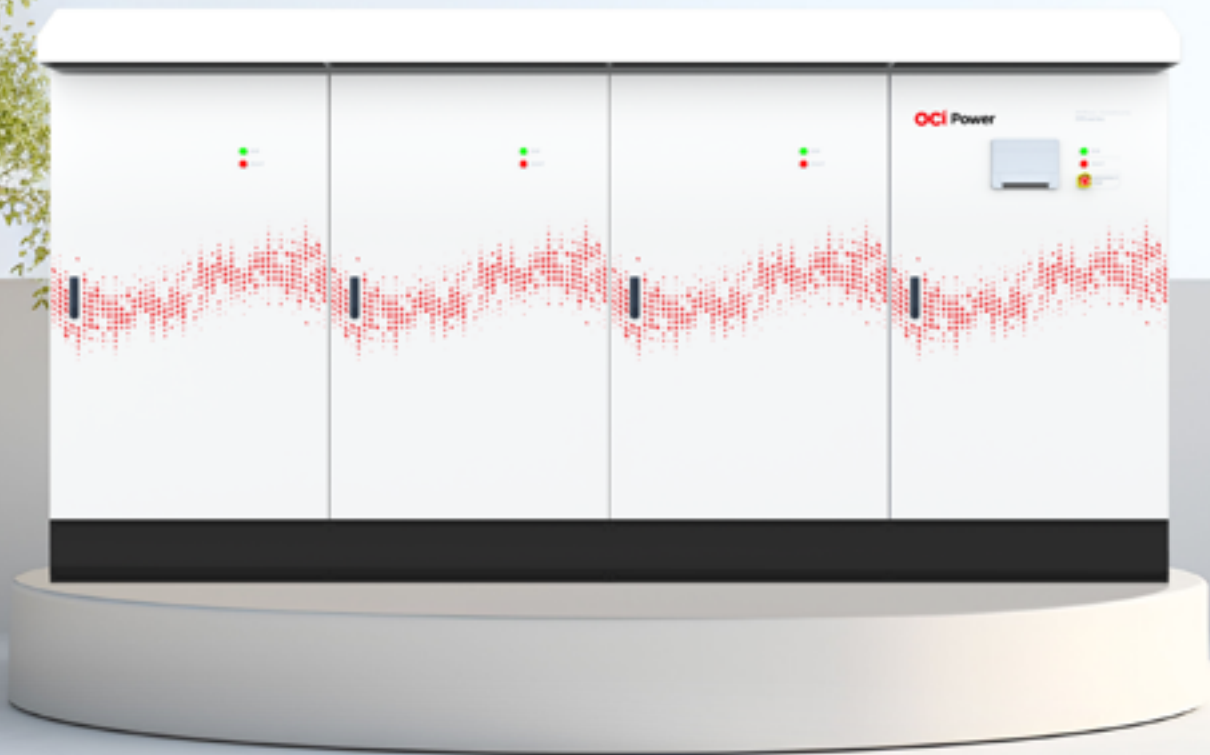


DRIVING SUSTAINABLE ENERGY



Solar Inverter (Photovoltaic Inverter)

ESS / PCS (Energy Storage System / Power Conditioning System)

EPC (Engineering, Procurement, Construction)

O&M (Solar Power plant's Operation & Maintenance)

OCI Power operates diverse energy businesses, focusing primarily on developing and manufacturing essential solutions for solar power generation within OCI Holding's core Energy Solutions business.

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OCI Power specializes in the development and manufacturing of PV Inverters and PCS (Power Conditioning Systems) for ESS (Energy Storage System). Our operations also include IPP (Independent Power Producer) business, EPC (Engineering, Procurement and Construction), ESS System Integration and other eco-friendly renewable energy projects.

By leveraging the advanced technologies of Germany and Korea, we independently develop solutions optimized for the specific needs of solar power. **All of our products are manufactured in-house at our production facility in Gunsan, South Korea.**

OCI Power supplies key equipment, including inverters, to large-scale solar power plants over 600 MW in Texas, USA, invested by OCI. With extensive experience in both the construction, operation, and maintenance of both PV and ESS around the world, we are dedicated to helping customers maximize performance and long-term value. As a Global Leading Green Energy Company, OCI Power is committed to deliver sustainable, reliable solutions for a cleaner and smarter energy future.

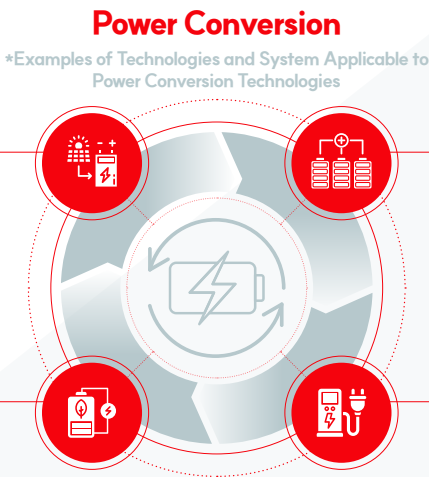
Core Technologies

Solar Power System

- PV inverter (DC/AC)
- PV String Optimizer (DC/DC)

Fuel Cell (Green Hydrogen)

- PCS for Fuel Cells (DC/DC,DC/AC)
- AC-DC Converter (DC/DC,DC/AC)



Energy Storage System

- Battery ESS PCS (DC/AC)
- DC Coupled PCS (DC/DC)

EV System

- EV Battery Charger
- Second-life Battery Utilization Technology

Business Areas

PV Inverter

Development & Manufacturing of PV Inverter



Energy Storage System

ESS System Integration · EPC



EPC, IPP

Engineering · Procurement · Construction, Independent Power Producer



Operation & Maintenance

O&M for Solar Power Plants



Key Milestones

OCI Power & KACO New Energy

OCI Power was established in 2012 as a wholly-owned subsidiary of OCI Holdings. Starting with the Alamo Project in the United States in 2012, OCI Power actively entered the solar energy solutions market in partnership with KACO New Energy, maintaining close cooperation. By 2019, OCI Power acquired the solar energy business from KACO New Energy, effectively integrating **advanced technologies from Germany and Korea**. Currently, OCI Power is responsible for developing and manufacturing large-scale inverters as Korea's leading inverter manufacturer.

2024	● Installed 1500Vdc inverter system with 47MW at Floating Solar Power Plant ● Launch of ultra-large capacity inverters (1.1~4.4MW)
2023	● Achieved export milestone: USD 7 MILLION ● Installed 4MW ESS Demonstration facility at ESS Safety Center of KESCO ● Installed 1500Vdc inverter system (OP Series) domestically (Cumulative capacity: 547 MW)
2020	● First domestic installation of 1500Vdc inverter system (OP series) with 96 MW capacity
2019	● Acquired KACO New Energy Korea's solar energy business
2018	● Installed 51MWh peak-shaving ESS at OCI Gunsan factory
2018	● Relocated headquarters and factory to the Gunsan Free Trade Zone
2016	● Released 2MW inverter for North American market (UL) ● Launched 1MW ESS PCS
2014	● Installed 17MW rooftop solar IPP project at Seoul Water Purification Plant
2014	● Supplied 1MW outdoor inverter to North American market (UL) ● Participated in the Korean government's FR ESS Project
2012	● Established OCI Power (OCI Holdings subsidiary)
2012	● Won Alamo project in the United States
2011	● Obtained Korea-EU FTA Certification ● Achieved export milestone: USD 50 MILLION
2010	● Certified 100,350kW inverter by CGC ● Achieved export milestone: USD 20 million ● First in Korea to obtain UL certification for PV inverters ● First in Korea to obtain CE certification for PV inverters
2007	● Established KACO Korea as a corporate R&D center

● OCI Power

● KACO (prior to the business transfer)

OCI Power is at the forefront of solar energy innovation, supported by a dedicated R&D center and a fully equipped manufacturing facility in Gunsan, South Korea. Our product lineup includes high-efficiency string and central inverters, as well as combiner boxes, designed to meet the needs of both utility-scale and commercial solar projects. In 2020, we became the first company in Korea to independently develop a 1500V DC inverter a major milestone that showcases our engineering leadership in advanced solar technologies. With over 12GW of installed capacity across Korea and global markets, OCI Power provides reliable, performance-driven inverter solutions that ensure stable operation, optimized energy output, and long-term value for project developers and asset owners.

Key Projects

- Over 12GW of installed capacity (Global)
- Over 3GW of installed capacity (in Korea)



K-Water Imha Dam 47MW



Haechangman 98MW



Smart Farm and Solar City 98MW



K-Water 11MW



OCI Pyeongtaek Rooftop Solar power 2.3MW



OCI Gunsan, Gwangyang, Nexolon 4.2MW



Jeonnam 8MW



LG Chemical / LG Electronics 6MW



Sejong, KOWEPO 5.9MW



Seoul Amsa Water Purification Plant 2.5MW



San Antonio, USA 600MW



Neuhardenberg, Germany 145MW



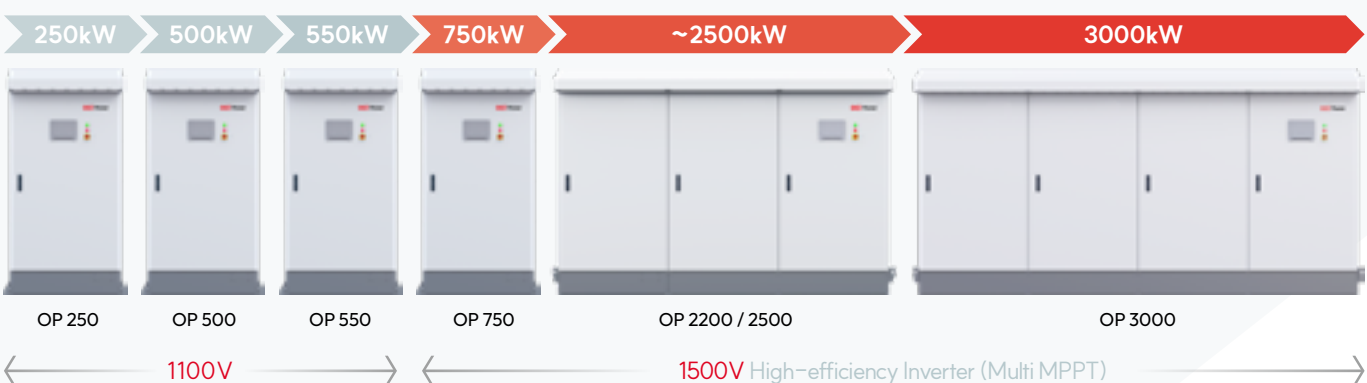
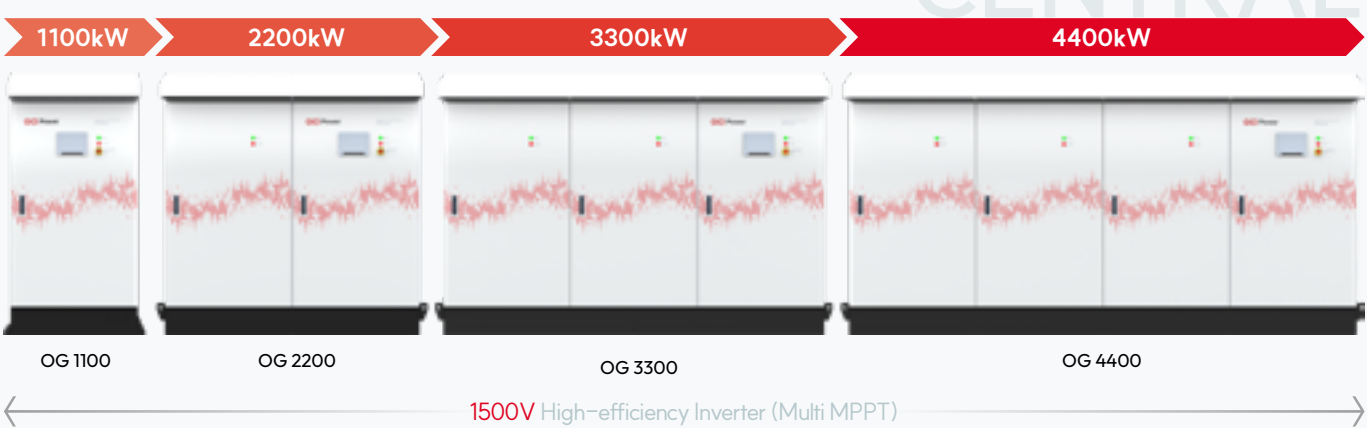
Alange, Spain 48MW



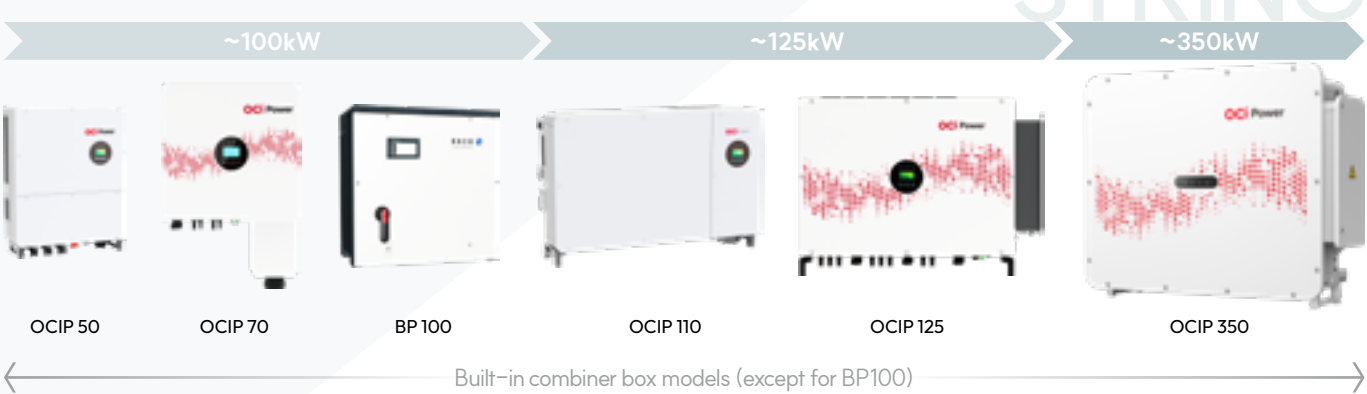
Monti di Eboli, Italy 24MW

PV Inverter Product Lineup

Ultra High-Efficiency System Central Inverter







Multi-functional String Inverters


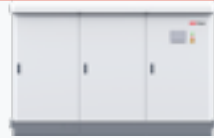
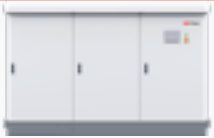
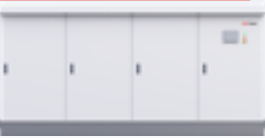


Specification

CENTRAL





	1100kW	2200kW	3300kW	4400kW
				
Model	NEW OG1100	NEW OG2200	NEW OG3300	NEW OG4400
DC Input				
Max. Input/ Start-up Voltage	1500V / 1150V			
MPP Voltage Range	935V ~ 1300V @AC Nominal Voltage (630V), 905V ~ 1300V @AC Minimum Voltage (567V)			
MPP Tracker / DC Input terminals	1 / 4	2 / 8	3 / 12	4 / 16
Max. Input / Short Circuit Current	1440A / 200kA	2880A / 200kA	4320A / 200kA	5760A / 200kA
AC Output				
Max. AC Output Power	1221kVA @ 40°C 1100kVA @ 45°C 800kVA @ 50°C	2442kVA @40°C 2200kVA @45°C 1600kVA @50°C	3663kVA @40°C 3300kVA @45°C 2400kVA @50°C	4884kVA @ 40°C 4400kVA @ 45°C 3200kVA @ 50°C
Rated AC Output Power	1100kW	2200kW	3300kW	4400kW
Nominal AC Voltage	630V (-10% ~+10%, 3ø3W)			
Rated / Max. Output Current	1008A / 1119A	2016A / 2238A	3024A / 3357A	4032A / 4475A
Rated Frequency	50/60Hz			
Total Harmonic Distortion (THD)	<3% @ Rated AC Current			
Power Factor Range	-0.9 ~ 0.9			
Power Consumption				
Control / Stand-by Power Consump.	< 1500W/ < 100W	< 3000W/ < 200W	< 4500W / < 300W	< 6000W/ < 400W
Efficiency				
Max. / EURO Efficiency	99.40% / 99%			
Operation Condition				
Operating / Storage Temp.	-20°C ~ +60°C (>40°C Power de-rating) / -20°C ~ +70°C			
Relative Humidity	0 ~ 95%(Non-condensing)			
Altitude	5000m			
Cooling Method	Forced Air			
Noise Level / Protection Level	<70 Db (A) / Outdoor (IP65/IP44)			
Physical Parameters				
Size (W/H/D mm)	1100 / 2275 / 950	2200 / 2275 / 950	3300 / 2275 / 950	4400 / 2275 / 950
Weight (kg)	1000	2000	3000	4000
Interface				
Display	HMI (with 7" color TFT LCD with Touch panel)			
Communication	RS485 / Ethernet			
Protocol	Modbus TCP (with Sunspec), Modbus RTU			
Certificates and Approvals	Performance Test Reports, DC Ground Fault Test Reports, KEPCO Power Factor Test Reports			
Features	Ground Fault Detection / Overvoltage Protection (PV DC& AC Grid), and FRT(LVRT, LFRT)			

CENTRAL





	<div>750kW</div> 	<div>2200kW</div> 	<div>2500kW</div> 	<div>3000kW</div> 
Model	OP750	OP2200	OP2500	OP3000
DC Input				
Max. Input/ Start-up Volt.	1500V / 945V, 999V	1500V / 999V	1500V / 1070V	1500V / 999V
MPP Voltage Range	890V~1300V		925V~1300V	890V~1300V
MPP Tracker / DC Input terminals	1 / +4, -4	3 / +12, -12		4 / +16, -16
Max. Input / Short Circuit Current	860A / 974A	2546A / 2922A	2784A / 2922A	3472A / 3896A
AC Output				
Max. AC Output Power	833kVA	2442kVA	2775kVA	3330kVA
Rated AC Output Power	750kW	2200kW	2500kW	3000kW
Output Voltage	600Vac		650Vac (L to L)	600Vac(L to L)
Rated Current	722A	2117A	2221A	2887A
Max. Overcurrent protection	938A	2434A	2554A	3320A
Rated Frequency	50/60Hz			
Total Harmonic Distortion (THD)	<3% @ Rated AC Current			
Power Factor Range	-0.9 ~ 0.9			
Control Input				
Control / Stand-by Power Consump.	< 1100W / < 80W	< 3300W/ < 300W		< 4400W/ < 400W
External Pwr Supply / Frequency	220V (±10%) / 50,60Hz	X		
Efficiency				
Max. / EURO Efficiency	98.69% / 98.47%	99.1% / 98.8%		99% / 98.8%
Operation Condition				
Operating / Storage Temp.	-20℃ ~ +60℃ (>35℃ derating) / -20℃ ~ +70℃			
Relative Humidity	0 ~ 95%(Non-condensing)			
Altitude	2000m			
Cooling Method	Forced Air			
Noise Level / Protection Level	<60 Db / Outdoor (IP65/IP44)			
Physical Parameters				
Size (W/H/D mm)	900 / 2150 / 1145	2700 / 2350 / 1145		3600 / 2350 / 1145
Weight (kg)	980	3000		4000
Interface				
Display	HMI (with 7" color TFT LCD with Touch panel)			
Communication	RS485 / Ethernet			
Protocol	Modbus TCP (with Sunspec), Modbus RTU(OP750), OP RS485(OP750)			
Certificates and Approvals	KS Certification (OP750)/Grid Connection Maintenance Function/ Performance Test (Satisfies RPS Industry Requirements)/DC Ground Fault Performance Test			
Features	Ground Fault Detection, Emergency Stop, Overvoltage Protection (PV DC, AC Grid, Ethernet)			

Specification

CENTRAL

250kW				
				
Model	OP250 (270V)	OP250 (290V)	OP250 TR (380V)	OP250 (310V)
DC Input				
Max. Input/ Start-up Volt.	1100V / 530V	1100V / 560V	1100V / 530V	1100V / 600V
MPP Voltage Range	430 ~ 830V	470 ~ 830V	480 ~ 830V	500 ~ 830V
MPP Tracker / DC Input terminals	1 / 4 (250A fuses each polarity)		1 / 3 (250A fuses each polarity)	1 / 4 (250A fuses each polarity)
Max. Input / Short Circuit Current	600A / 666A	549A / 666A	545A / 433A	516A / 666A
AC Output				
Max. AC Output Power	275kVA			
Rated AC Output Power	250kW			
Output Voltage	270V (-12% ~+10%, 3ø3W)	290V (-12% ~+10%, 3ø3W)	380V (-12% ~+10%, 3ø4W)	310V (-12% ~+10%, 3ø3W)
Rated Current	535A	498A	380A	466A
Max. Overcurrent protection	572A	533A	494A	499A
Rated Frequency	60Hz		50/60Hz	60Hz
Total Harmonic Distortion (THD)	<3% @ Rated AC Current			
Power Factor Range	-0.9 ~ 0.9			
Control Input				
Control / Stand-by Power Consump.	< 1100W / < 100W			
External Pwr Supply / Frequency	220V(±10%) / 50,60Hz			
Efficiency				
Max. / EURO Efficiency	97.91% / 97.54%	97.92% / 97.53%	96.88% / 95.97%	TBD / TBD
Operation Condition				
Operating / Storage Temp.	-20°C ~ +40°C / -20°C ~ +70°C / 0 ~ 95% (Non-condensing)			
Max. Operating Altitude	2000m			
Cooling Method	Forced Air			
Device Noise	<70 Db			
Protection Grade	Outdoor (IP65/IP44)			
Physical Parameters				
Size (W/H/D mm)	900 / 2150 / 1145		1100 / 2150 / 1150	900 / 2150 / 1145
Weight (kg)	980		1500	980
Interface				
Display	HMI (with 7" color TFT LCD with Touch panel)			
Communication	RS485 / Ethernet			
Protocol	Modbus (with Sunspec), Modbus RTU, RS485 Protocol			
Certificates and Approvals	KS Certification/ Grid Connection Maintenance Function / DC Ground Fault Performance Test/ Remote Control Function			
Features	Ground Fault Detection , Emergency Stop, Overvoltage Protection(PV DC, AC Grid, Ethernet) supported			




CENTRAL


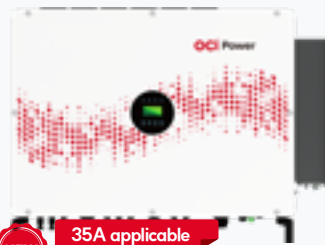

	250kW		500kW		550kW
					
Model	OP250 (340V)	OP500 (340V)	OP500 (380V)	OP550	
DC Input					
Max. Input/ Start-up Volt.	1100V / 660V	1100V / 670V	1100V / 670V		
MPP Voltage Range	530 ~ 830V	560 ~ 830V	560V ~ 830V		
MPP Tracker / DC Input terminals	1 / 4 (250A fuses each polarity)	1 / +5, -5	1 / +5, -5		
Max. Input / Short Circuit Current	487A / 666A	920A / 974A	920A / 974A	1013A / 974A	
AC Output					
Max. AC Output Power	275kVA	555kVA	555kVA		
Rated AC Output Power	250kW	500kW	500kW		
Output Voltage	340V (-12% ~+10%, 3ø3W)	340V	380V		
Rated Current	425A	836A	760A	836A	
Max. Overcurrent protection	455A	1087A	988A	1087A	
Rated Frequency	60Hz	50/60Hz	50/60Hz		
Total Harmonic Distortion (THD)	<3% @ Rated AC Current				
Power Factor Range	-0.9 ~ 0.9				
Control Input					
Control / Stand-by Power Consump.	< 1100W / < 100W				
External Pwr Supply / Frequency	220V(±10%) / 50,60Hz				
Efficiency					
Max. / EURO Efficiency	TBD / TBD	98.12% / 97.74%	98.19% / 97.82%	98.12% / 97.74%	
Operation Condition					
Operating / Storage Temp.	-20°C ~ +40°C (OP250 TR 380V: -20°C ~ +50°C) / -20°C ~ +70°C / 0 ~ 95% (Non-condensing)				
Relative Humidity	2000m				
Cooling Method	Forced Air				
Device Noise	<70 Db		<60 Db		
Protection Grade	Outdoor (IP65/IP44)				
Physical Parameters					
Size (W/H/D mm)	900 / 2150 / 1145				
Weight (kg)	980				
Interface					
Display	HMI (with 7" color TFT LCD with Touch panel)				
Communication	RS485 / Ethernet				
Protocol	Modbus (with Sunspec), Modbus RTU, RS485 Protocol				
Certificates and Approvals	KS Certification/ Grid Connection Maintenance Function / DC Ground Fault Performance Test/ Remote Control Function				
Features	Ground Fault Detection , Emergency Stop, Overvoltage Protection(PV DC, AC Grid, Ethernet) supported				

Specification

STRING

STRING

	50kW	70kW	100kW
			
Model	OCIP50	OCIP70	BP100
DC Input			
Max. PV Voltage	66kW	77kVA	100kW
MPP Range	480 ~ 800V	550 ~ 850V	563 ~ 1200V
DC Operation Range	200 ~ 1000V		563 ~ 1500V
Max. Input Voltage	1000V	1100V	1000 / 1500V
Start-up Voltage	350V	250V	645V
Max. Input Current	3 x 39 / 3 x 32 / 3 x 39A	180A (4 x 45A)	183A
MPP Trackers	3	4	1
Number of Strings per MPP	3 / 2 / 2 pairs	3	1 pair
AC Output			
Rated Output	50kW	70kW	100kW
Rated Frequency / Current	60Hz / 76A	60Hz / A	60Hz / 152A
Output Voltage	380V	400V	380V
Power Factor	0.99	0.8 leading – 0.8 lagging	0.99
Circuit Configuration	3-phase 4-wire		
Product Data			
Max. Efficiency	97.80 / 97.80 / 97.60%	98.6%	98.68%
Euro Efficiency	97.44 / 97.45 / 97.40%	98.3%	98.38%
Standby Power Consumption	< 5W		
Transformer Type	Transformerless		
Connection Box	Integrated		
Environmental Data			
Protection Grade	IP65	IP66	
Operating Temperature Range	-25℃ ~ +60℃		
Cooling Method	Forced Air		
Device Noise	< 70dB	70dB (at 1m distance from Inverter)	< 70dB
Size & Weight			
Size (W / H / D mm)	630 / 1034 / 280	515 / 585 / 287	699 / 719 / 460
Weight (kg)	62	55	78.2
Certifications and Approvals			
Certifications and Test Reports	KS / DC Ground Fault Protection / Grid Connection Maintenance Function / Remote Control Function		

	110kW	125kW	350kW
			
Model	OCIP110	OCIP125	OCIP350
DC Input			
Max. PV Voltage	185kW	130kVA	352kVA
MPP Range	480 ~ 850V	550~850V	880 ~ 1300V
DC Operation Range	200 ~ 1000V		500 ~ 1500V
Max. Input Voltage	1100V		1500V
Start-up Voltage	300V	250V	650V
Max. Input Current	10 x 26.6 / 10 x 32 / 10 x 39.8A	360A (8 x 45A)	480A (12 x 40A)
MPP Trackers	10	8	12
Number of Strings per MPP	2 pairs	2	2
AC Output			
Rated Output	110kW	125kW	350kW
Rated Frequency / Current	60Hz / 167A	60Hz / 185.4A	60Hz / 256.2A
Output Voltage	380V		800V
Power Factor	0.99	0.8 leading – 0.8 lagging	
Circuit Configuration	3-phase 4-wire		3-phase 3-wire
Product Data			
Max. Efficiency	97.93 / 97.90 / 97.92%	98.7%	99%
Euro Efficiency	97.55 / 97.53 / 97.53%	98.1%	99%
Standby Power Consumption	< 5W		
Transformer Type	Transformerless		
Connection Box	Integrated		
Environmental Data			
Protection Grade	IP66		
Operating Temperature Range	-25°C ~ +60°C	-30°C ~ +60°C	
Cooling Method	Forced Air		
Device Noise	< 70dB	70dB(at 1m distance from Inverter)	
Size & Weight			
Size (W / H / D mm)	1055 / 735 / 336	965 / 700 / 355	1150 / 860 / 393
Weight (kg)	94	85	125
Certifications and Approvals			
Certifications and Test Reports	KS / DC Ground Fault Protection / Grid Connection Maintenance Function / Remote Control Function		

Energy Storage System (ESS)

OCI Power delivers complete, end-to-end ESS solutions from system design and installation to long-term maintenance in close collaboration with power system specialists and seasoned field engineers. By integrating advanced battery technology, our proprietary PCS (Power Conditioning System), and smart control software, we offer energy storage systems that are fast to deploy, highly stable, and cost-effective, with minimized operational risk. Our flagship solution, the ESS Cube, is purpose-built for solar applications and combines enhanced safety, intelligent monitoring, and optimized energy management all within a compact, integrated system.

Key Achievements



OCI Plant ESS 10MW / 51 MWh



HMG Reusable Battery ESS / 307 kWh



HHI Marine SOFC / 100 kWh



K-Water / 4 MWh



ESS Safety Center 2MW / 4MWh



OCI Specialty 0.3MW / 0.85MWh



KRCC / 6.9 MWh



LS Buildwin / 3 MWh

ESS Installation Solutions



Optimal Technical Expertise

Possessing engineering and design capabilities for all functions of ESS through in-house development and production



Systematic Operation

Possessing analysis technology for various batteries to ensure economic and stable operation of ESS systems



Excellent Durability

Design considering a lifespan of 20 years, extending fan lifespan and improving efficiency through fan speed control



Competitive Pricing

On-site delivery with factory assembly and inspection shortens construction, while ready-made products keep prices competitive

ESS – PCS (OS500)

Compact Size

- Compact size for cost competitiveness and reduced installation expenses
- Outdoor design possible for PCS and electrical facilities

IP65 Protection Grade

- Outdoor design enabled with IP65 enclosure
- C5-M High corrosion resistance

Various Voltage Range

- Versatility to accommodate various voltage ranges (AC600V, 500V, 420V) and battery voltage ranges



Power Plant O&M (Operation & Maintenance)

OCI Power offers professional O&M services built on extensive field experience, proven construction expertise, and proprietary energy technology. Our team of specialized field technicians, supported by a rapid-response system, utilizes advanced predictive maintenance tools to optimize every aspect of plant operation. We help customers operate their energy assets with confidence maximizing reliability, efficiency, and uptime. As a trusted long-term partner, OCI Power is committed to delivering outstanding plant performance and improved profitability for every project we manage.

O&M Service



Free Inverter Repair Service After Warranty Period



Inverter-Specialized Regular Inspections and Preventive Maintenance



Linked Service Offerings

KEY Points for Plant Operation: Inverter

134, 49.26 %	Inverter	27.55 %
13, 41.54 %	Module	0.86 %
10, 3.68 %	Power System	33.44 %
8, 2.94 %	PWR Distributor	34.75 %
5, 1.84 %	Junction Box	2.77 %
2, 0.74 %	DC Wiring	0.63 %

Issue Occurrence[Number, %] Power Generation Loss Rate

Integrated One-Stop Services Linked to O&M



Old Inverter Replacement Service

- ✓ We offer retrofit solutions for inverters that are no longer supported due to manufacturer closure or market withdrawal.
- ✓ Selected products allow direct 1:1 replacements without additional electrical work or transformer changes.



Power Plant Performance Improvement

- ✓ Provide solutions addressing root causes of energy yield reduction identified during plant management and diagnostics.
- ✓ EPC-linked construction services are available through OCI Power upon request.



Power Plant Transaction Review

- ✓ Property and plant asset valuation based on historical energy generation data.
- ✓ Support for business transfer processes, including contractual transfers related to business permits/licenses.

Inverter Retrofit Service

Closure of inverter manufacturer

Extended repair times and increased maintenance costs

Errors in initial plant design

Performance Improvement



Improved Plant Efficiency



Increased Revenue



Reduced Operating Costs

SITE

Head Quarter | 1st-2nd Floor, 5th factory, 15, Jayumuyeok 2-gil, Gunsan-si, Jeollabuk-do, Republic of Korea
(Postal Code 54001)

Seoul Office, R&D Center | 4th, OCI Bldg, 94, Sogong-ro, Jung-gu, Seoul, Republic of Korea
(Postal Code 04532)

Homepage



LinkedIn



Safety Caution

- * Please read and follow the user manual carefully before using the product to ensure safe usage.
- * The contents of this catalog are subject to change without prior notice. Please verify them at the time of purchase.
- * For safety during maintenance and servicing, please refrain from disassembling or repairing the product arbitrarily and contact a professional.