

# OPTIMUS ON-LINE HYBRID INVERTER SERIES 10KW OP-10K-UP-0



# Revolutionizing Energy Efficiency with Flexibility and Reliability

The Optimus On-Line Series Hybrid Inverter (OP-10K-UP-O) sets new standards in energy management, enabling smarter energy usage and ensuring peak performance. Designed for modern households, it offers advanced features like scheduled energy redistribution and a robust, weather-resistant design.

## **Key Features**

#### **Smart Energy Scheduling**

- Sell Energy Back to the Grid: The Optimus UP Series allows you to schedule energy redistribution back to the grid during peak hours when electricity costs are highest, ensuring maximum savings and profits.
- Affordable Energy Storage: Charge and store energy during off-peak times when electricity costs are lowest, providing significant cost efficiency and reducing grid reliance.

#### **Outdoor-Friendly Design**

- **IP65-Rated Protection:** The inverter features an IP65-rated enclosure, making it resistant to dust and water, ensuring reliable operation in outdoor environments.
- Versatile Placement: Ideal for installation on outer walls, optimizing space usage while maintaining easy access for maintenance.

#### **Cutting-Edge Efficiency**

- 99.9% MPPT Efficiency: Leverage advanced Maximum Power Point Tracking (MPPT) technology to extract maximum energy from your solar panels.
- High-Powered Solar Input: Supports up to 5,500W + 5,500W PV array power with dual MPPT trackers.

#### Seamless Battery Integration

• Compatible with Li-ion, Lead-acid, and user-defined batteries, supporting up to 200A charging current for rapid and efficient storage.

#### Scalable and Flexible

- Parallel Connection: Connect up to 6 units to meet growing energy demands, perfect for both residential and commercial applications.
- Pure Sine Wave Output: Delivers stable and high-quality AC power, ensuring compatibility with all sensitive electronics.

#### **Reliable Performance**

- **Robust Build:** Operates efficiently across a wide temperature range (-10°C to 55°C) and features advanced cooling with an internal fan.
- Certified Safety: Meets all major safety standards, including IEC62109-1, UL1741, and RoHS, ensuring long-term safety and durability.



# Why Choose the Optimus UP Series Hybrid Inverter?

- Unparalleled Cost Efficiency: Maximize savings with peak-valley time-slot scheduling, using energy when it's
  cheapest and selling surplus power during high-demand periods.
- Reliable and Resilient: With an IP65 enclosure, this inverter is built to withstand outdoor elements, offering long-lasting and dependable performance.
- Smart, Scalable Solutions: Designed to adapt to your needs, from single-unit setups to parallel connections supporting large-scale energy systems.
- **Eco-Friendly Investment:** Reduce your carbon footprint with an intelligent, sustainable energy system that enhances your property's value.

NOTICE   Co-Init-CUP-O				
Rested Cutput Power  Max PeoRic Rower  Rested Cutput Violage  Rested Cutput Violage  Rested Cutput Violage  Rested Cutput Violage  Rested Act Prequency  Sol/solate  Rested Act Prequency  Sol/solate  Rested Act Prequency  Sol/solate  Rested Rester Violage  Rested Rester Violage  Max PV Charging Gurrent  Max Mones Charging Current  Max Alternator Charging Current  Max Alternator Charging Current  Alternative Rester  Po Neuru  Numar of ARRET  2  Max PV Array Power  Solow-1800W  Max Put Current  Max Alternator Charging Current  Max Copen-circuit Violage  Max		MODEL	OP-10K-UP-O	Can Be Set
Max. Peck Planer  Reted Cutput Vallage  120/240Vas; singler-phase / typin-phase / typ	N	INVERTER OUTPUT		
### ### ### ### ### ### ### ### ### ##		Rated Output Power	10,000W	
Load Capacity of Motors	-	Max. Peak Power	20,000VA	
## Roted AC Prequency   \$0/60Hz    ## BATTERY    ## Battery Type		Rated Output Voltage	120/240Vac, single-phase / split-phase / three-phase(parallel)	<b>Y</b>
BATTERY  Rottery Type  Lead-acid / Li-lon / User-defined  #BATTERY  Rottery Type  Roted battery Vottoge  #BATTERY  Max. PV Charging Current  200A  #Mx. PV Charging Current  80A  Max. Hybrid Charging Current  80A  #Mx. Hybrid Charging Current  200A  #WASTER Charging Current  200A  #WASTER Charging Current  200A  #WASTER CHARGE CHA		Load Capacity of Motors	6НР	
Bottery Type Lead-acid / Li-lon / User-defined  #Roted Bottery Votoge #897  Max. PV Charging Current 200.6  #Askennator Charging Current 200.6  #Askennator Charging Current 50.0  #Askennator Charging Current 50.0  #Askennator Charging Current 50.0  #Askennator Charging Current 50.0  ##WOX. PV Array Power 50.000 ### 50.000 ###  #### 50.000 ###  ##### 50.000 ###  #############################		Rated AC Frequency	50/60Hz	
Roted Bottery Voltage		BATTERY		
Max. PV Charging Current         200A           Max. Mains Charging Current         120A           Mox. Atternator Charging Current         60A           Mox. Hybrid Charging Current         200A           VP NRVIT           Num. of MPPT         2           Mox. PV Array Power         6,600W+8,600W           Mox. Input Current         22A+22A           Mox. Open-circuit Voltage         500vdc+500vdc           MPPT Operating Voltage Range         125425Vdc           MANS / GENRATOR INPUT         60140Vac           Ipput Voltage Range         80140Vac           Frequency Range         50/60Hz           GENERAL         Num. of Practilel           Num. of Practilel         16 units           Dimensions         750*440*240mm (2.46*1.44*0.79th)           Weight         42kg (9.259tb)           Protection Degree         IP65           Operating Temperature Range         -28-500x 428 derated           Cooling Method         Intelligent air-cooling           Warranty         5 years           COMALINICATION         External Modules (optional)         Wi-Fi / GPRS           CERTIFICATION         IEC82/08-1, IEC82/08-2		Battery Type	Lead-acid / Li-ion / User-defined	<b>✓</b>
Max Mains Charging Current  Max Mains Charging Current  Max Hybrid Charging Current  PV INPUT  Num of MRPT  2  Max PV Array Power  8,600W+8,600W  Max Input Current  2224-224  Max Open-circuit Vottage  MPPT Operating Vottage Range  MPPT Operating Vottage Range  MANN / GENERATOR INPUT  Input Vottage Range  Frequency Range  GENERAL  Num of Parcitel  Dimensions  750*440*243mm (2.48*1.44*0.79tt)  Weight  42kg (25.58ib)  Frotection Degree  Operating Temperature Range  Cooling Method  Intelligent air-cooling  Warrany  Embedded Interfaces  RS485 / CAN / USB / Dry contact  VERTICATION  Safely  Safely  IEC62109-1 IEC62109-2		Rated Battery Voltage	48V	
Max. Alternator Charging Current  Max. Hybrid Charging Current  PV INPUT  Num. of MPPT  2  Max. PV Array Power  6,600W+8,600W  Max. Input Current  22A+22A  Max. Open-circuit Voltage  May Open-circuit Voltage  MPPT Operating Voltage Range  125~425Vdc  MANN / GENERATOR INPUT  Input Voltage Range  90~140Vdc  ✓ Frequency Range  90~140Vdc  ✓ Frequency Range  650/60Hz  GENERAL  Num. of Parallel  1~6 units  Dimensions  750*440*240mm (2.46*1.44*0.79ft)  Weight  42kg (92.59fb)  Protection Degree  Operating Temperature Range  Coeling Method  Intelligent air-cooling  Warranty  Communication  Embedded Interfaces  RS488 / CAN / USB / Dry contact  ✓ External Modules (optional)  CERTIFICATION  Safety  IEC82109-1, IEC82109-2		Max. PV Charging Current	200A	<b>✓</b>
Max. Hybrid Charging Current   200A		Max. Mains Charging Current	120A	<b>✓</b>
More Hybrid Charging Current  PV INPUT  Num. of MPPT  2  Mox PV Array Power  6,600W+6,600W  Mox Input Current  22A+22A  Mox Open-circuit Voltage  500Vdc+500Vdc  MPPT Operating Voltage Range  125~425Vdc  MAINS / GENERATOR INPUT  Input Voltage Range  90~140Vdc  Frequency Range  50/60Hz  6FRERAL  Num. of Parallel  Dimensions  750*440*240mm (2.46*1.44*0.79ft)  Weight  42kg (92.59lb)  Protection Degree  Operating Temperature Range  Cooling Method  Intelligent air-cooling  Worronty  6 years  COMMUNICATION  Embedded Interfaces  RS485 / CAN / USB / Dry contact  External Modules (optional)  CERTIFICATION  Sofety  IEC82109-1, IEC82109-2		Max. Alternator Charging Current	60A	
Num. of MPFT         2           Max. PV Array Power         6,600W+6,600W           Max. Input Current         22A+22A           Max. Open-circuit Voltage         500Vdc+500Vdc           MPPT Operating Voltage Range         125~425Vdc           MAINS / GENERATOR INPUT         Input Voltage Range         90~140Vdc           Frequency Range         50/60Hz           GENERAL         Num. of Parallel         1~6 units           Dimensions         750*440*240mm (2.46*1.44*0.79t)           Weight         42kg (92.59lb)           Protection Degree         IP65           Operating Temperature Range         -25-60% 458 derated           Cooling Method         Intelligent air-cooling           Warranty         5 years           COMMUNICATION         Embedded Interfaces         R5485 / CAN / USB / Dry contact         ✓           External Modules (optional)         WI-FI / GPRS           CERTIFICATION         IEC62109-1, IEC62109-2		Max. Hybrid Charging Current	200A	~
Max Py Array Power         6,600W+6,600W           Max Input Current         22A+22A           Max Open-circuit Voltage         560Vdc+560Vdc           MFPT Operating Voltage Range         125~425Vdc           MAINS / GENERATOR INPUT         Input Voltage Range         90~140Vac         ✓           Frequency Range         50/60Hz           GENERAL         Num. of Parallel         1~6 units           Dimensions         750*440*240mm (2.46*1.44*0.79ft)           Weight         42kg (92.59lb)           Protection Degree         IP65           Operating Temperature Range         -25-60Q.145@ derated           Cooling Method         Intelligent air-cooling           Warranty         5 years           COMMUNICATION         Enbedded Interfaces         RS485 / CAN / USB / Dry contact         ✓           External Modules (aptional)         Wi-Fi / GPRS           CERTIFICATION         IEC62109-1, IEC62109-2		PV INPUT		
Max Input Current         22A+22A           Max Open-circuit Voltage         500vdc+500vdc           MPPT Operating Voltage Range         125~425vdc           MAINS / GENERATOR INPUT         Input Voltage Range         90~140Vac         ✓           Frequency Range         50/60Hz           GENERAL         Num. of Parallel         1~6 units           Dimensions         750*440*240mm (2.46*1.44*0.79ft)           Weight         42kg (92.59ib)           Protection Degree         19-65           Operating Temperature Range         -25-60%, 45% derated           Cooling Method         Intelligent air-cooling           Warranty         5 years           COMMUNICATION         Embedded Interfaces         R\$485 / CAN / USB / Dry contact         ✓           External Modules (optional)         Wi-Fi / GPRS           CERTIFICATION         IEC62109-1, IEC62109-2		Num. of MPPT	2	
Max. Open-circuit Voltage         500Vdc+500Vdc           MPPT Operating Voltage Range         125~425Vdc           MAINS / GENERATOR INPUT         Iriput Voltage Range         90~140Vac         ✓           Frequency Range         50/60Hz           GENERAL         Num. of Parallel         1~6 units           Dimensions         750*440*240mm (2.46*1.44*0.79tt)           Weight         42kg (92.59lb)           Protection Degree         IP65           Operating Temperature Range         -25-60(2.45%) derated           Cooling Method         Intelligent air-cooling           Warranty         5 years           COMMUNICATION         Embedded Interfaces         RS485 / CAN / USB / Dry contact         ✓           External Modules (optional)         Wi-Fi / GPRS           CERTIFICATION         IEC62109-1           Safety         IEC62109-2		Max. PV Array Power	6,600W+6,600W	
MPPT Operating Voltage Range  MAINS / GENERATOR INPUT  Injust Voltage Range  90~140Vac  Frequency Range  50/60Hz  GENERAL  Num. of Parallel  Dimensions  750*440*240mm (2.46*1.44*0.79ft)  Weight  42kg (92.59lb)  Protection Degree  IP65  Operating Temperature Range  Cooling Method  Intelligent air-cooling  Warranty  S years  COMMUNICATION  Embedded Interfaces  External Modules (optional)  CERTIFICATION  Sofety  IEC62109-1, IEC62109-2		Max. Input Current	22A+22A	
MAINS / GENERATOR INPUT  Input Voltage Range 90~140Vac ✓  Frequency Range 50/60Hz  GENERAL  Num. of Parallel 1~6 units  Dimensions 750*440*240mm (2.46*1.44*0.79ft)  Weight 42kg (92.59lb)  Protection Degree IP65  Operating Temperature Range -25-60®, 245® derated  Cooling Method Intelligent air-cooling  Warranty 5 years  COMMUNICATION  Embedded Interfaces RS485 / CAN / USB / Dry contact ✓  External Modules (optional) Wi-Fi / GPRS  CERTIFICATION  Safety IEC62109-1, IEC62109-2		Max. Open-circuit Voltage	500Vdc+500Vdc	
Input Voltage Range  Frequency Range  50/60Hz  Frequency Range  50/60Hz  GENERAL  Num. of Parallel  1~6 units  Dimensions  750*440*240mm (2.46*1.44*0.79ft)  Weight  42kg (92.59lb)  Protection Degree  IP65  Operating Temperature Range  Cooling Method  Intelligent air-cooling  Warranty  5 years  COMMUNICATION  Embedded Interfaces  RS485 / CAN / USB / Dry contact  External Modules (optional)  Vi−Fi / GPRS  CERTIFICATION  Safety  IEC62109-1, IEC62109-2		MPPT Operating Voltage Range	125~425Vdc	
Frequency Range 50/60Hz  GENERAL  Num. of Parallel 1∼6 units  Dimensions 750*440*240mm (2.46*1.44*0.79ft)  Weight 42kg (92.59lb)  Protection Degree IP65  Operating Temperature Range −25-60®,>45® derated  Cooling Method Intelligent air-cooling  Warranty 5 years  COMMUNICATION  Embedded Interfaces RS485 / CAN / USB / Dry contact ✓  External Modules (optional) Wi-Fi / GPRS  CERTIFICATION  Safety IEC62109-1, IEC62109-2		MAINS / GENERATOR INPUT		
GENERAL   Num. of Parallel 1~6 units   Dimensions 750*440*240mm (2.46*1.44*0.79ft)   Weight 42kg (92.59lb)   Protection Degree IP65   Operating Temperature Range -25-60®,>45® derated   Cooling Method Intelligent air-cooling   Warranty 5 years   COMMUNICATION   Embedded Interfaces RS485 / CAN / USB / Dry contact   External Modules (optional) Wi-Fi / GPRS   CERTIFICATION   Safety IEC62109-1, IEC62109-2		Input Voltage Range	90~140Vac	<b>✓</b> ∧
Num. of Parallel  Dimensions  750*440*240mm (2.46*1.44*0.79ft)  Weight  42kg (92.59lb)  Protection Degree  IP65  Operating Temperature Range  Cooling Method  Intelligent air-cooling  Warranty  5 years  COMMUNICATION  Embedded Interfaces  RS485 / CAN / USB / Dry contact  External Modules (optional)  CERTIFICATION  Safety  IEC62109-1, IEC62109-2		Frequency Range	50/60Hz	
Dimensions 750*440*240mm (2.46*1.44*0.79ft)  Weight 42kg (92.59lb)  Protection Degree IP65  Operating Temperature Range -25-60%,>45% derated  Cooling Method Intelligent air-cooling  Warranty 5 years  COMMUNICATION  Embedded Interfaces R\$485 / CAN / USB / Dry contact  ✓ External Modules (optional)  CERTIFICATION  Safety IEC62109-1, IEC62109-2		GENERAL		
Weight  42kg (92.59lb)  Protection Degree  IP65  Operating Temperature Range  Cooling Method  Intelligent air-cooling  Warranty  5 years  COMMUNICATION  Embedded Interfaces  RS485 / CAN / USB / Dry contact  ✓  External Modules (optional)  CERTIFICATION  Safety  IEC62109-1, IEC62109-2		Num. of Parallel	1∼6 units	
Protection Degree  Operating Temperature Range  Cooling Method  Intelligent air-cooling  Warranty  Syears  COMMUNICATION  Embedded Interfaces  RS485 / CAN / USB / Dry contact  External Modules (optional)  CERTIFICATION  Safety  IP65  Intelligent air-cooling  Number Syears  Figure Syears  IEC62109-1, IEC62109-2		Dimensions	750*440*240mm (2.46*1.44*0.79ft)	
Operating Temperature Range  Cooling Method  Intelligent air-cooling  Warranty  5 years  COMMUNICATION  Embedded Interfaces  RS485 / CAN / USB / Dry contact  ✓  External Modules (optional)  CERTIFICATION  Safety  IEC62109-1, IEC62109-2		Weight	42kg (92.59lb)	
Cooling Method  Warranty  5 years  COMMUNICATION  Embedded Interfaces  RS485 / CAN / USB / Dry contact  External Modules (optional)  Wi-Fi / GPRS  CERTIFICATION  Safety  IEC62109-1, IEC62109-2		Protection Degree	IP65	
Warranty 5 years  COMMUNICATION  Embedded Interfaces RS485 / CAN / USB / Dry contact  ✓  External Modules (optional) Wi-Fi / GPRS  CERTIFICATION  Safety IEC62109-1, IEC62109-2		Operating Temperature Range	-25~60%>45½ derated	
COMMUNICATION  Embedded Interfaces RS485 / CAN / USB / Dry contact  External Modules (optional) Wi-Fi / GPRS  CERTIFICATION  Safety IEC62109-1, IEC62109-2		Cooling Method	Intelligent air-cooling	
Embedded Interfaces  RS485 / CAN / USB / Dry contact  External Modules (optional)  Wi-Fi / GPRS  CERTIFICATION  Safety  IEC62109-1, IEC62109-2		Warranty	5 years	
External Modules (optional)  CERTIFICATION  Safety  IEC62109-1, IEC62109-2		COMMUNICATION		
CERTIFICATION Safety IEC62109-1, IEC62109-2		Embedded Interfaces	RS485 / CAN / USB / Dry contact	<b>/</b>
Safety IEC62109-1, IEC62109-2		External Modules (optional)		
		CERTIFICATION		
Rohs Yes		Safety	IEC62109-1, IEC62109-2	
	N	Rohs	Yes	

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