

EcoFlow OCEAN Pro Hybrid Inverter

Complete Product Datasheets

The EcoFlow OCEAN Pro Hybrid Inverter is a multi-functional hybrid inverter that can be paired with EcoFlow's OCEAN series products to enable household solar self-consumption, economical electricity usage, and off-grid backup power. It can connect to both solar panels and high-voltage DC batteries, as well as—via its built-in Inlet Box—accommodate portable generators, portable power stations, and V2L-enabled electric vehicles. As the PCS with the strongest driving capacity and the most diverse backup power sources on the market, it offers unparalleled flexibility and reliability.

Nominal Orid Voltage (Input & Output) 120/240V- (Split phase) 208Y/120V-, 3W (from 30 4W)	Dundund	Product Name	EcoFlow OCEAN Pro Hybrid Inverter
Spit phase Spi	Product	Model Number	EF-PCS-24
Spit phase Spi			
Frequency Grid Frequency Range Grid Frequency Range S7Hz-63Hz Nominal Output Power (AC) Maximum Apparent Power (AC) Maximum Continuous Output Current (AC) Maximum Continuous Cutrent (AC) Maximum Continuous Charge Current / Power Output Power Factor Rating Solar to Battery to Home / Grid Efficiency Solar to Battery to Home / Grid Efficiency Solar to Home / Grid Efficiency Solar to Home / Grid Efficiency Supported Islanding Devices Ecoflow OCEAN Smart Electrical Panel, Ecoflow OCEAN Meter Backup Switch, Ecoflow OCEAN Meter Backup Switch, Ecoflow OCEAN Meter Backup Switch, Ecoflow OCEAN Gateway. Device Solar to Home / Grid Efficiency Supported Islanding Devices ELE, Wi-Fi (2.46Hz), Ethernet, Cellular (LTE/4G 5) 1 pair of CAN for batteries, 1 pair of CAN for Inverter parallel, RS485 for Meters, 2 pairs of CAN for Inverter parallel, RS485 for Meters, 3 pairs of CT connectors. 1 Ethernet port. 1 Emergency Protection Operation (EPO) connector with 2-pins. AC Metering 4/-1% AC Metering 4/-1% Isolation Monitor Interrupter (IMI), PV Integrated Aro Fault Interrupter (AFCI), PV Ground Fault Circuit Interrupter (AFCI), PV Rapid Shutchown (RSD) with APsmart/NEP/Tigo, AC Anti-Islanding protection Load Start Capability Up to 2 units supported (48kW) Type of Couple Customer Interface EcoFlow Mobile APP		Nominal Grid Voltage (Input & Output)	
Grid Frequency Range S7Hz-63Hz		Grid Type	Split phase
Nominal Output Power (AC) Maximum Apparent Power (AC) Maximum Continuous Output Current (AC) Maximum Continuous Charge Current / Power Output Power Factor Rating Solar to Battery to Home / Grid Efficiency Finergy Scalability Up to 8 OCEAN Pro Batteries (80 kWh) with one Inverter EcoFlow OCEAN Smart Electrical Panel, EcoFlow OCEAN Smart Electrical Panel, EcoFlow OCEAN Mater Backup Switch, EcoFlow OCEAN Gateway Connectivity BLE, Wi-Fi (2.4GHz), Ethernet, Cellular (LTE/4G 5) 1 pair of CAN for batteries, 1 pair of CAN for Backup Switch, EcoFlow OCEAN Gateway Technical Specifications AC Metering 4.7-1% AC Metering 4.7-1% AC Metering 4.7-1% Load Start Capability Power Scalability 205A LRA (1s) Up to 2 curits supported (48kW) Type of Couple AC coupled and DC coupled Customer Interface EcoFlow Mobile APP		Frequency	60Hz
Maximum Apparent Power (AC) Maximum Continuous Output Current (AC) Maximum Continuous Output Current (AC) Maximum Continuous Charge Current / Back 100A Overcurrent Protection Device Maximum Continuous Charge Current / Power Output Power Factor Rating Solar to Battery to Home / Grid Efficiency Solar to Home / Grid Efficiency Solar to Home / Grid Efficiency Energy Scalability Up to 8 OCEAN Pro Batteries (80 kWh) with one Inverter EcoFlow OCEAN Smart Electrical Panel, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Gateway Connectivity BLE, Wi-Fi (2.4GHz), Ethernet, Cellular (LTE/4G 5) 1 pair of CAN for Inverter parallel, RS485 for Meters, 2 pairs of CAN for Backup Switch or Gateway, 3 pairs of CT connectors. 1 Ethernet port. 1 Emergency Protection Operation (EPO) connector with 2-pins. AC Metering 4/-1% Isolation Monitor Interrupter (AFCI), PV Ground Fault Circuit Interrupter (AFCI), PV Ground Fault Circuit Interrupter (AFCI), PV Ground Fault Circuit Interrupter (AFCI), PV Rapid Shutdown (RSD) with APsmart/NEP/Tigo, AC Anti-Islanding protection Load Start Capability Up to 2 units supported (48kW) Type of Couple Customer Interface EcoFlow Mobile APP		Grid Frequency Range	57Hz~63Hz
Maximum Continuous Output Current (AC) Vercurrent Protection Device Maximum Continuous Charge Current / Power Output Power Factor Rating Solar to Battery to Home / Grid Efficiency Solar to Home / Grid Efficiency Energy Scalability Up to 8 OCEAN Pro Batteries (80 kWh) with one Inverter EcoFlow OCEAN Smart Electrical Panel, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Gateway Connectivity BLE, Wi-Fi (2.4GHz), Ethernet, Cellular (LTE/4G 5) 1 pair of CAN for Inverter parallel, RS485 for Meters, 2 pairs of CAN for Backup Switch or Gateway, 3 pairs of Connectors. 1 Ethernet port. 1 Emergency Protection Operation (EPO) connector with 2-pins. AC Metering AC Metering AC Metering AC Mattering Load Start Capability Dever Scalability Up to 2 Units supported (48kW) Type of Couple AC coupled and DC coupled Customer Interface EcoFlow Modele APP		Nominal Output Power (AC)	11.5kW 24.0kW
Overcurrent Protection Device 60A 125A Maximum Continuous Charge Current / Power 100A AC/24kW (5kW per battery) Output Power Factor Rating 0.8 leading - 0.8 lagging Solar to Battery to Home / Grid Efficiency 87% Solar to Home / Grid Efficiency 97.5% Energy Scalability Up to 8 OCEAN Pro Batteries (80 kWh) with one Inverter EcoFlow OCEAN Smart Electrical Panel, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Smart Electrical Panel, EcoFlow OCEAN		Maximum Apparent Power (AC)	11.5kVA 24.0kVA
Maximum Continuous Charge Current / Power Output Power Factor Rating Solar to Battlery to Home / Grid Efficiency Solar to Home / Grid Efficiency Solar to Home / Grid Efficiency Energy Scalability Up to 8 OCEAN Pro Batteries (80 kWh) with one inverter EcoFlow OCEAN Smart Electrical Panel, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN for batteries, 1 pair of CAN for Inverter parallel, RS485 for Meters, 2 pairs of CAN for Backup Switch or Gateway, 3 pairs of CT connectors. 1 Emergency Protection Operation (EPO) connector with 2-pins. AC Metering +/-1% Isolation Monitor Interrupter (IMI), PV Integrated Arc Fault Interrupter (GFCI), PV Rapid Shutdown (RSD) with APsmart/NEP/Tigo, AC Anti-Islanding protection Load Start Capability Deforming Coupled Customer Interface EcoFlow Mobile APP		Maximum Continuous Output Current (AC)	48A 100A
Output Power Factor Rating Solar to Battery to Home / Grid Efficiency Solar to Home / Grid Home, Factor of Carbon Monitor Interrupter (IM), PV Integrated Arc Fault Interrupter (IM), PV Ground Fault Circuit Interrupter (GFC), PV Rapid Shutdown (RSD) with APsmart/NEP/Tigo, AC Anti-Islanding protection Load Start Capability Solar to Home / Grid Efficiency Solar to Home / Grid Fault Interrupter (IM), PV Integrated Arc F		Overcurrent Protection Device	60A 125A
Solar to Battery to Home / Grid Efficiency Solar to Home / Grid Efficiency 97.5% Energy Scalability Up to 8 OCEAN Pro Batteries (80 kWh) with one Inverter EcoFlow OCEAN Smart Electrical Panel, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Mater Backup Switch, EcoFlow Mobile APP Supported Islanding Devices EcoFlow OCEAN Mater Backup Switch, EcoFlow Mobile APP Supported Islanding Devices EcoFlow Mobile APP Supported Islanding Devices EcoFlow Mobile APP Supported Islanding Devices EcoFlow Mobile APP		Maximum Continuous Charge Current / Power	100A AC/24kW (5kW per battery)
Solar to Home / Grid Efficiency 97.5% Energy Scalability Up to 8 OCEAN Pro Batteries (80 kWh) with one Inverter EcoFlow OCEAN Smart Electrical Panel, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Meter Backup Switch In pa		Output Power Factor Rating	0.8 leading ~ 0.8 lagging
Energy Scalability Up to 8 OCEAN Pro Batteries (80 kWh) with one Inverter EcoFlow OCEAN Smart Electrical Panel, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Gateway Connectivity BLE, Wi-Fi (2.4GHz), Ethemet, Cellular (LTE/4G 5) 1 pair of CAN for batteries, 1 pair of CAN for Inverter parallel, RS485 for Meters, 2 pairs of CAN for Backup Switch or Gateway, 3 pairs of CT connectors. 1 Ethernet port. 1 Emergency Protection Operation (EPO) connector with 2-pins. AC Metering 4/-1% Isolation Monitor Interrupter (IMI), PV Integrated Arc Fault Interrupter (AFCI), PV Graund Fault Circuit Interrupter (AFCI), PV Rapid Shutdown (RSD) with APsmart/NEP/Tigo, AC Anti-Islanding protection Load Start Capability 205A LRA (1s) Power Scalability Up to 2 units supported (48kW) Type of Couple Customer Interface EcoFlow Mobile APP		Solar to Battery to Home / Grid Efficiency	87%
System Technical Specifications EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Gateway Connectivity BLE, Wi-Fi (2.4GHz), Ethermet, Cellular (LTE/4G 5) 1 pair of CAN for Inverter parallel, RS485 for Meters, 2 pairs of CAN for Backup Switch or Gateway, 3 pairs of CT connectors. 1 Ethermet port. 1 Ethermet port. 1 Emergency Protection Operation (EPO) connector with 2-pins. AC Metering 4/-1% Isolation Monitor Interrupter (IMI), PV Integrated Arc Fault Interrupter (AFCI), PV Ground Fault Circuit Interrupter (AFCI), PV Rapid Shutdown (RSD) with APsmart/NEP/Tigo, AC Anti-islanding protection Load Start Capability Demonstrated Coupled Customer Interface EcoFlow OCEAN Meter Backup Panel, EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Meter Backup Switch Sw		Solar to Home / Grid Efficiency	97.5%
System Technical Specifications Supported Islanding Devices Connectivity BLE, Wi-Fi (2.4GHz), Ethernet, Cellular (LTE/4G 5) 1 pair of CAN for batteries, 1 pair of CAN for Inverter parallel, RS485 for Meters, 2 pairs of CAN for Backup Switch or Gateway, 3 pairs of CT connectors. 1 Ethernet port. 1 Emergency Protection Operation (EPO) connector with 2-pins. AC Metering 4/-1% Bolation Monitor Interrupter (IMI), PV Integrated Arc Fault Interrupter (AFCI), PV Rapid Shutdown (RSD) with APsmart/NEP/Tigo, AC Anti-islanding protection Load Start Capability 205A LRA (1s) Power Scalability Up to 2 units supported (48kW) Type of Couple Customer Interface EcoFlow OCEAN Meter Backup Switch, EcoFlow OCEAN Gateway 1 pair of CAN for Interface EcoFlow OCEAN Meters, 2 pairs of CAN for Inverter parallel, RS485 for Meters, 1 pair of CAN for Inverters, 2 pairs of CAN for Inverters, 1 p		Energy Scalability	Up to 8 OCEAN Pro Batteries (80 kWh) with one Inverter
Connectivity BLE, Wi-Fi (2.4GHz), Ethernet, Cellular (LTE/4G 5)	System	Supported Islanding Devices	EcoFlow OCEAN Meter Backup Switch,
Hardware Interface 1 pair of CAN for batteries, 1 pair of CAN for Inverter parallel, RS485 for Meters, 2 pairs of CAN for Backup Switch or Gateway, 3 pairs of CT connectors. 1 Ethernet port. 1 Emergency Protection Operation (EPO) connector with 2-pins. AC Metering		Connectivity	BLE, Wi-Fi (2.4GHz), Ethernet, Cellular (LTE/4G 5)
Isolation Monitor Interrupter (IMI), PV Integrated Arc Fault Interrupter (AFCI), PV Integrated Arc Fault Interrupter (AFCI), PV Ground Fault Circuit Interrupter (GFCI), PV Rapid Shutdown (RSD) with APsmart/NEP/Tigo, AC Anti-islanding protection	Specifications	Hardware Interface	1 pair of CAN for Inverter parallel, RS485 for Meters, 2 pairs of CAN for Backup Switch or Gateway, 3 pairs of CT connectors. 1 Ethernet port.
PV Integrated Arc Fault Interrupter (AFCI), PV Ground Fault Circuit Interrupter (GFCI), PV Rapid Shutdown (RSD) with APsmart/NEP/Tigo, AC Anti-islanding protection Load Start Capability 205A LRA (1s) Power Scalability Up to 2 units supported (48kW) Type of Couple AC coupled and DC coupled Customer Interface EcoFlow Mobile APP		AC Metering	+/-1%
Power Scalability Up to 2 units supported (48kW) Type of Couple AC coupled and DC coupled Customer Interface EcoFlow Mobile APP		Protections	PV Integrated Arc Fault Interrupter (AFCI), PV Ground Fault Circuit Interrupter (GFCI), PV Rapid Shutdown (RSD) with APsmart/NEP/Tigo,
Type of Couple AC coupled and DC coupled Customer Interface EcoFlow Mobile APP		Load Start Capability	205A LRA (1s)
Type of Couple AC coupled and DC coupled Customer Interface EcoFlow Mobile APP		Power Scalability	Up to 2 units supported (48kW)
Customer Interface EcoFlow Mobile APP		-	
Warranty 15 years		**	
		Warranty	15 years
		,	

Solar Technical Specifications	Maximum Solar STC Input	40kW
	Withstand Voltage	600V DC
	PC DC Input Voltage Range	60~550V DC
	PV DC MPPT Voltage Range	60~480V DC
	MPPTs	8 (5kW per channel)
	Maximum Current per MPPT (Imp)	16A
	Maximum Short Circuit Current per MPPT (Isc)	20A



	Connector Type	SS2-50P
Extend Backup Socket Technical Specification	Confidential Type	
	Connect Power Source Type	Portable generator (120V or 240V), Portable power station, EV with V2L
	Input Voltage	120V/240V AC
	Frequence	60Hz
	Maximum Continuous Current	41.6A AC
	Maximum Continuous Power	10kW
	Minimum Continuous Power	300W
	Safety	System: UL 9540 with OCEAN Pro Battery,UL 1741 with MSA PCS: UL 1741, UL 3141, UL 1741 SB, UL 1699B, UL 1998, IEEE 1547, IEEE 1547 (LUMA), IEEE 1547A, IEEE 1547.1, CA Rule No.21, HECO SRD 2.0, CSA C22.2 No. 107.1:16
Compliance Information	Emissions	FCC Part 15B, FCC Part 15C, FCC Part 15E ICES-003, RSS-247
	Environmental	California Proposition 65 TSCA
	Seismic	AC156, IEEE 693-2005 (high)
		,
	Operating Temperature	-4°F to 140°F (-20°C to 60°C) >113°F (45°C) Derating
	Operating Humidity (RH)	Up to 100%, condensing
		-4°F to 86°F (-20°C to 30°C), up to 95% RH,
	Storage Temperature	noncondensing, State of Energy (SOE): 25% initial
	Storage Temperature Maximum Elevation	
Environmental		noncondensing, State of Energy (SOE): 25% initial
Environmental Specifications	Maximum Elevation	noncondensing, State of Energy (SOE): 25% initial 9843ft (3000m)
	Maximum Elevation Environment	noncondensing, State of Energy (SOE): 25% initial 9843ft (3000m) Indoor and outdoor rated
	Maximum Elevation Environment Enclosure Rating	noncondensing, State of Energy (SOE): 25% initial 9843ft (3000m) Indoor and outdoor rated NEMA 3R IP67 (Power Electronics),
	Maximum Elevation Environment Enclosure Rating Ingress Protection (IP) Rating	noncondensing, State of Energy (SOE): 25% initial 9843ft (3000m) Indoor and outdoor rated NEMA 3R IP67 (Power Electronics), IP54 (PCS Wiring Compartment)
	Maximum Elevation Environment Enclosure Rating Ingress Protection (IP) Rating Pollution Rating	noncondensing, State of Energy (SOE): 25% initial 9843ft (3000m) Indoor and outdoor rated NEMA 3R IP67 (Power Electronics), IP54 (PCS Wiring Compartment) PD3
	Maximum Elevation Environment Enclosure Rating Ingress Protection (IP) Rating Pollution Rating Operating Noise@1m	noncondensing, State of Energy (SOE): 25% initial 9843ft (3000m) Indoor and outdoor rated NEMA 3R IP67 (Power Electronics), IP54 (PCS Wiring Compartment) PD3 < 45 dB(A) typical , < 60 dB(A) maximum
	Maximum Elevation Environment Enclosure Rating Ingress Protection (IP) Rating Pollution Rating Operating Noise@1m Mounting Options	noncondensing, State of Energy (SOE): 25% initial 9843ft (3000m) Indoor and outdoor rated NEMA 3R IP67 (Power Electronics), IP54 (PCS Wiring Compartment) PD3 < 45 dB(A) typical , < 60 dB(A) maximum
Specifications	Maximum Elevation Environment Enclosure Rating Ingress Protection (IP) Rating Pollution Rating Operating Noise@1m	noncondensing, State of Energy (SOE): 25% initial 9843ft (3000m) Indoor and outdoor rated NEMA 3R IP67 (Power Electronics), IP54 (PCS Wiring Compartment) PD3 < 45 dB(A) typical , < 60 dB(A) maximum Wall mount
	Maximum Elevation Environment Enclosure Rating Ingress Protection (IP) Rating Pollution Rating Operating Noise@1m Mounting Options Height/inches	noncondensing, State of Energy (SOE): 25% initial 9843ft (3000m) Indoor and outdoor rated NEMA 3R IP67 (Power Electronics), IP54 (PCS Wiring Compartment) PD3 < 45 dB(A) typical, < 60 dB(A) maximum Wall mount 43.3in/1100mm