

# OCC-HPP

## Hybrid Power Processor

Connect what you have. Get what you need.



[www.onecyclecontrol.com](http://www.onecyclecontrol.com)

### BENEFITS

- Hardware enabled control
  - Ultrafast, precise, and stable
- High efficiency
  - Energy saving
- Simple user interface
  - Low maintenance & low service
- Long life design
  - Low logistics & installation cost
- Light weight minimum raw material usage
  - Environmentally friendly
- Small size
  - Space saving

### FEATURES

- One-Cycle Control Technology
- Power factor > 0.99
- Current harmonics < 3%
- Efficiency > 97%
- Stable zero load operation
- Leading response speed (100s of microsec)
- Leading light weight < 29 kg (65 lbs)
- Leading power density ~20 W/inch<sup>3</sup> to 30 W/inch<sup>3</sup>
- Single unit 40kW to 60kW, scalable to MW

### OVERVIEW

OCC-HPP leverages unique patented technology invented at Caltech & University of California Irvine and developed by world leading power-electronic experts under partial sponsorship of U.S. Department of Defense. OCC-HPP is the first hardware-enabled Hybrid-Power system that converts AC & DC sources or energy storage to desired Off-Grid AC & DC power with high reliability and simple user interface, enabling high-quality output power to diverse loads. OCC-HPP features a modular design and industry-leading power density.

### APPLICATIONS

- Hybrid Power
- Disaster Response
- Remote Power
- Mobile Power

### OPTIONS

- Various Input & Output Voltages
- Various Input & Output Frequencies
- 50, 60, or 400Hz input and/or output
- Extended Temperature Range
- Condensing Environments

	HPP3050A2208/8002IR	HPP3050A2380/8002IR	HPP3050A2480/8002IR
<b>Mechanical Specifications</b>	<b>Ruggedized Shock Rack Transport Case</b>		
<b>Weight kg (lb)</b>	300		
<b>Size (L x W x H) (inch)</b>	40 x 24 x 24		
<b>NEMA Type</b>	3		

	HPP3050A2208/8002IR	HPP3050A2380/8002IR	HPP3050A2480/8002IR
<b>AC Output Port*</b>	<b>1-Phase, 3-Phase, or combination</b>		
<b>AC Voltage</b>	120 / 208V	230 / 380V	277 / 480V
<b>AC Freq Range (Hz)</b>	60 Hz	50 Hz	60 Hz
<b>AC Phase</b>	3-Phase 4-Wire		
<b>Max AC Current (A, rms)</b>	50A		
<b>% THD @ Full Power</b>	3%		
<b>AC Convenience Outlet</b>	Max 15A @ 120 Vac, 1-Phase Duplex Outlet with GFI		
<b>Auto Load Shedding</b>	✓		
<b>HVDC Port:*</b>	<b>Solar, Wind, or Battery (EV, PHEV)</b>		
<b>DC Voltage</b>	265 - 720 Vdc		
<b>DC Current</b>	150A		
<b>MPPT Selectable (with PV or Wind)</b>	✓		
<b>AC Input Port:*</b>	<b>Grid or Generator Input</b>		
<b>AC Phase</b>	3-Phase 3-Wire		
<b>AC Freq (Hz)</b>	50 / 60 Hz		
<b>AC Voltage (Vrms)</b>	380, 400, 415, 480V		
<b>Max AC Current (Arms)</b>	50A		
<b>LVDC Output*</b>	<b>Charging &amp; Power Outputs</b>		
<b>USB (5Vdc)</b>	10 ports @ 2A each		
<b>Accessory (12Vdc)</b>	2 ports @ 5A each		
<b>MIL (24Vdc)</b>	2 ports @ 5A each		
<b>Auto Load Shedding</b>	✓		
<b>Input to Output</b>			
<b>Efficiency</b>	92%		
<b>Environment Specifications</b>			
<b>Operating Temp. (°C)</b>	-30 to +40		
<b>Operating Relative Humidity</b>	0 - 100 %RH; Condensing		
<b>Storage Temp. (°C)</b>	-40 to +55		
<b>Audible Noise (dBA) @ 1m (3ft)</b>	80		
<b>Wash Down</b>	Designed		
<b>Standards</b>			
<b>UL 508C</b>	Designed		
<b>MIL-STD 810G</b>	Designed		