

**IDEAL POWER CONVERTERS'** patented current-modulation power converter topology establishes a new industry standard for reducing weight/installation costs, improve efficiency, and improving reliability.

IPC's **IVC-60kW-480** is a bidirectional electric vehicle charger supporting the SAE J1772 Combi-connector vehicle interface. With an external controller the system supports four quadrant power (load/supply & real/reactive) for Vehicle-to-Grid functionality, and microgrid islanding.

The **IVC-60kW-480** is built on the same Universal Power Converter Platform™ as its initial 30kW photovoltaic inverter.



**36.5 x 28 x 10.75 inches  
180 lbs, wall-mount**



#### **Reduced shipping and installation costs**

- >90% weight reduction of competing systems
- Simple indoor or outdoor wall-mount installation

#### **Improved Energy Efficiency**

- Highest efficiency and widest operating range

#### **Improved reliability**

- No electrolytic capacitors are used
- 100% soft switching reduces component stress
- Sealed electronics protects from dust and contaminants
- High overvoltage line transient withstand capability

#### **SAE Vehicle Interface**

- J1772 Combi-Connector
- J2847-2 Communications for DC energy transfer

#### **U.S. Commercial standard output power**

- 480V AC 3 phase

#### **Reactive Power and Microgrid Capable**

- Supports Four Quadrant Power - load/supply & real/reactive
- Active neutral for unbalanced loads

## SPECIFICATIONS

DC — Input or Output		
Max DC Voltage	900	
Min DC Voltage	100	
Grounding	floating or grounded (with 500V max to ground)	
AC — Input or Output		
Output Voltage	480V AC $\pm$ 10%	
Output Frequency	60 Hz $\pm$ 1%	
Harmonics	<3% THD	
Power Factor	>0.99	
Transient Protection	IEEE C62.41 Class B*	
Power and Efficiency Ratings		
	at 450V DC	at 600V DC
Max Continuous Power	50kW	60kW
Max DC Current	111Amps	100Amps
Full Power Efficiency	96%	97%
Protection		
	AC over/under voltage	
	AC over/under frequency	
	AC/DC over current	
	DC ground fault (GFDI)	
Environmental		
Ambient Temperature	-13 to 122 °F / -25 to 50 °C (full power)	
Cooling	forced convection using redundant variable speed fans	
Enclosure	NEMA 3R indoor/outdoor mounting	
Certifications	UL 1741, IEEE 1547, FCC Part 15 Class A*	
General		
Weight	180 lbs / 82 kg	
Enclosure Size	36.5 x 28 x 10.75 inches / 97.2 x 71.1 x 27.3 cm	
Communications	CAN, RS-485, Ethernet, 3rd party compatible monitoring	
System Requirements	external DC and AC disconnects required	
Warranty	5 year commercial warranty	

\*Certifications and efficiency tests pending.

