

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

IPC's **IWC-30kW-480** is the first cost-effective, single stage converter system that can directly convert power from an asynchronous AC generator to synchronous AC grid. It is ideal for a variety of medium-scale asynchronous AC generator applications including wind, hydro, diesel, and gas co-generation.

The **IWC-30kW-480** is built on the same Universal Power Converter Platform™ as IPC's initial 30kW photovoltaic inverter.



**36.5 x 15 x 10.75 inches  
94 lbs, wall-mount**

#### **Lower weight reduces shipping and installation costs**

- Ships UPS ground without expensive freight charges
- Simple indoor or outdoor wall-mount installation

#### **Improved Energy Harvesting**

- Highest efficiency and widest operating range
- Eliminates need for rectifier stage in conventional two stage full converters

#### **Improved reliability through design improvements**

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

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

- 480V AC 3 phase
- 3 wire, no neutral, plus ground connections to generator and to grid.
- Multiple systems can be used in parallel to provide higher power

## SPECIFICATIONS

### Input — Asynchronous AC generator

Max Operating Voltage	480V
Min Operating Voltage	0V
Max Operating Frequency	60 Hz
Min Operating Frequency	0 Hz
Max Input Current (per phase)	38 Amps

### Output — Synchronous AC grid

Continuous AC Power	30kW
Weighted Efficiency	97.0%*
Max Current (per phase)	36 Amps
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*

### Protection

AC over/under voltage
AC over/under frequency
AC over current

### Environmental

Ambient Temperature	-13 to 122 °F / -25 to 50 °C (full power)
Cooling	forced convection using redundant variable speed fans
Enclosure	NEMA 3R
Certifications	UL 1741, IEEE 1547, FCC Part 15 Class A*

### General

Weight	94 lbs / 42 kg
Enclosure Size	36.5 x 15 x 10.75 inches / 97.2 x 38.1 x 27.3 cm
Communications	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.



**IDEAL POWER CONVERTERS** develops and manufactures its products in the U.S.A.