

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

IPC's **IBC-30kW-480** is a bidirectional battery charger supporting both battery charging and discharging functions. This eliminates the need for a separate inverter used in conventional battery charging/discharging systems.

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



**36.5 x 15 x 10.75 inches
94 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 in its class
- 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

U.S. Commercial standard output power

- 480V AC 3 phase

Flexible System Configuration

- Interfaces to external Battery Management System
- Multiple systems can be used in parallel to provide higher power
- Support for Four Quadrant Power (load/supply & real/reactive)

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 | 25kW | 30kW |
| Max DC Current | 55Amps | 50Amps |
| 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 | 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.

