



PLIV Series Inverters

2 to 10 kVA, 120 Vac, 60 Hz Output 48 Vdc Input

Standard Features

User Friendly Interface

- LCD with Status, Meter and Alarm screens.
- Industrial style LED Mimic Diagram.
- Nine button control keypad.
- 200 event Alarm History with date and time stamp.
- Four remote alarm contacts (user configurable).
- RS-485, 2-wire interface with Modbus protocol.
- RS-232 interface with Philtek protocol.

Power Circuit

- High frequency PWM switching technology, using IGBT's.
- Pure Sine Wave AC output.
- Low audible noise.
- High efficiency.
- Inverter Output isolation transformer provides galvanic isolation between DC and AC circuits.
- Powers virtually any load, compatible with Nonlinear and Active Power Factor Corrected AC Loads.
- Input and Output Circuit Breakers.
- Automatic DC Input Pre-charge circuit.

Integral Static Bypass Switch

- Output power fully rated.
- Zero Break with 2 mSec detection time.
- User configured to operate in the Online (Inverter preferred) or the Offline (AC line preferred) mode.
- Provides maximum protection when operated in the Online Mode.
- Provides economy operation when operated in the Offline Mode.

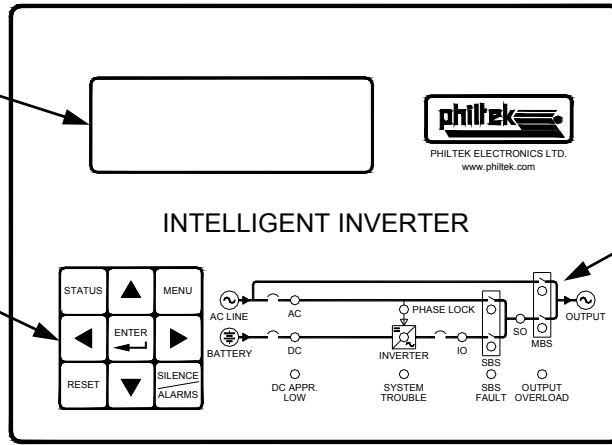
Packaging

- 2, 3, & 5 kVA in a wall mount, 19" rack mount or 23" rack mount design. Rack sold separately. Floor mount stand option available.
- 10 kVA in a 23" rack mount design. Rack sold separately. Floor mount stand option available.
- Air intake at front and bottom. Exhaust at top. Rear clearance is not required.
- Temperature controlled variable speed cooling fans.



4 x 20 Backlit LCD Screen

3 x 3 Control Keypad



Comprehensive LED Mimic Diagram

Inverter Control Panel

Inverter Specifications (Subject to change without notice)

DC Input

Nominal 48 V
 Range 42 to 60 V
 Current See Table
 Noise feedback < 32 dBrc

AC Line Input

Connection 2 Wires + Ground
 Voltage 120 V, 1 Phase, 60 Hz
 Current Same as output current

AC Output

Power See table
 Connection 2 Wires + Ground
 Voltage 120 Vac, 1 Phase, 60 Hz
 Regulation ± 1%
 Dynamic Regulation:
 100 % step load ± 4%
 Recovery < 8 ms
 Efficiency ≥ 90 %
 Distortion (linear load) < 1.0 % THD
 Non Linear Load Capability Up to 100 %
 Active P.F. Corrected Loads Compatible
 Load Power Factor (PF) 1.0
 Frequency Tolerance ± 0.1 % free running
 Overload 125 % for 20 minutes
 Synchronization:
 Range ± 1.5 Hz
 Slew Rate 1 Hz per sec.

Static Bypass Switch

Transfer Time Online Mode: 2 ms typical, 4.2 ms max
 Transfer Time Offline Mode: 8.4 ms maximum
 Voltage Tolerance ± 10 %
 Frequency Tolerance ± 1.5 Hz
 Overload: 125 % for 20 Minutes
 1000 % for 8 ms

Metering

Standard SBS Output: V, A, Hz, KVA & KW
 Inverter Output: V & Hz
 AC Line Input: V & Hz
 DC Input: V, A & KW

Operating Environment

Temperature 0° C to 40° C
 Humidity 95 % RH
 Audible noise 50 dBA @ 1 meter typical
 Cooling Forced Air with temperature controlled fans

Ordering Information

Inverter Model #	Output	Output Current	Input Current	Base Dimensions	Approx. Weight
PLIV 2K-48-N	2,000 VA @ 0.8 PF	16.7 A	45 A @ 42 Vdc	24.5"H x 17"W x 14.8"D	140 Lbs.
PLIV 3K-48-N	3,000 VA @ 0.8 PF	25.0 A	67 A @ 42 Vdc	24.5"H x 17"W x 14.8"D	165 Lbs.
PLIV 5K-48-N	5,000 VA @ 0.8 PF	41.7 A	112 A @ 42 Vdc	24.5"H x 17"W x 14.8"D *	210 Lbs.
PLIV 10K-48-N	10,000 VA @ 0.8 PF	83.3 A	224 A @ 42 Vdc	36"H x 21"W x 17"D	355 Lbs.

Option Table (Other options available)

Code	Option
MBS(XR) **	Internal (or External Rack mount) Maintenance Bypass Switch, "Make before Break" allows complete service with no power interruption.
AL8	Four contacts added for a total of eight Remote Alarm Contacts.
SVW	Replaces the RS-232 port with an internal Status-Via-Web Ethernet device. Allows remote control and monitoring via Web Page, SNMP and Modbus TCP/IP. (Separate external SVW device also available)

For Example:

PLIV 10K-48-N+MBSXR+SVW

Model No.

Options

For More Information please Contact:

In Canada

In USA

Philtek Electronics Ltd.

Philtek Power Corp.

Tel: (604) 270-4642

Tel: (360) 332-7252

Fax: (604) 270-8343

E-mail: info@philtek.com

* PLIV 5K-120-N also available in an optional 36" x 21" x 17" (SZ3) enclosure.

** Internal MBS not available for PLIV 5K-120-N in the standard enclosure.