



HPRi Series Single Phase 50 Hz

Up to 50 kVA 220 Vac Output

48 VDC Modular Inverter System

The Philtek HPRi Modular Inverter System features both Expandable and Redundant capabilities

The System is comprised of:

Inverter Modules “Plug and Play”

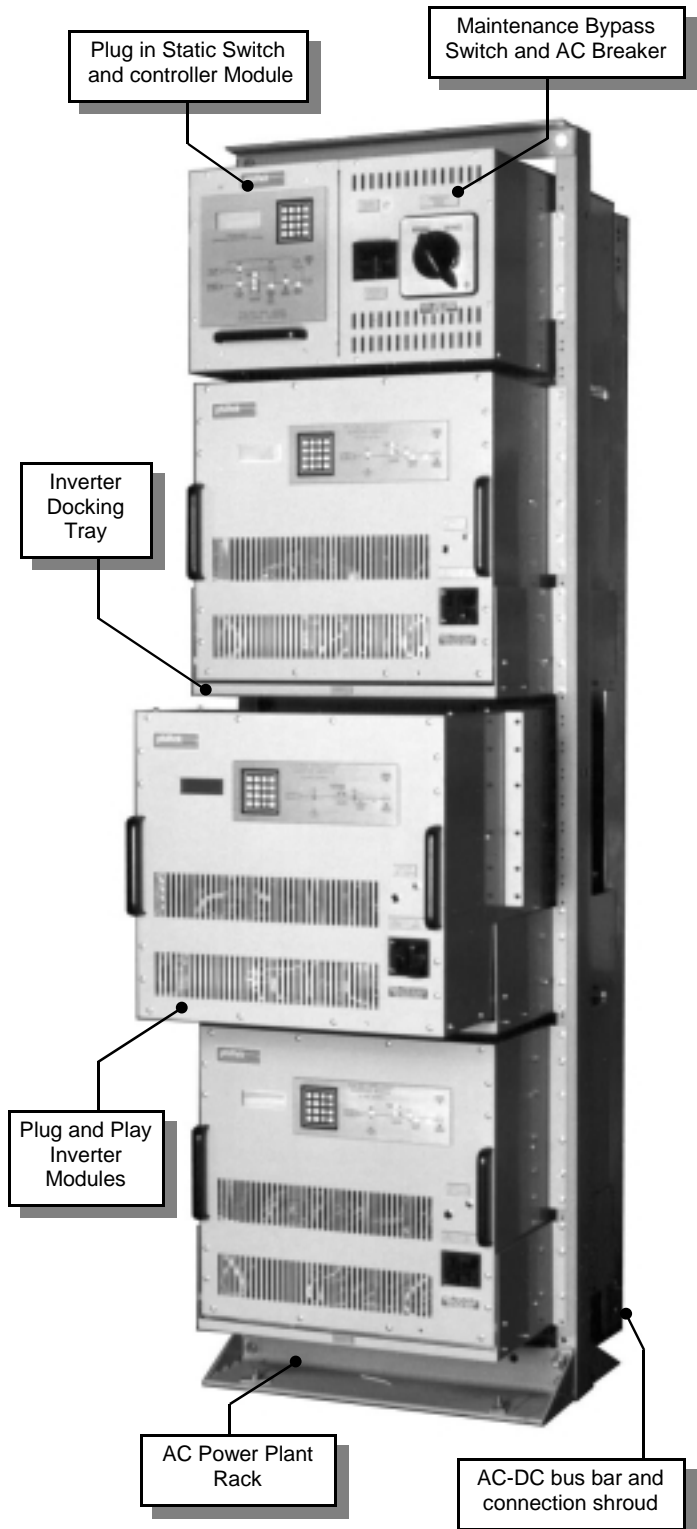
- 5 KVA or 10 KVA output each
- High frequency PWM technology, quiet operation
- Parallel connected with automatic load sharing
- “Hot Pluggable”, allows addition or removal of modules without de-energizing the system
- Output compatible with Active Power Factor Corrected AC Loads

Static Bypass Switch and Controller

- 2.5 mSec transfer time
- Microprocessor Controlled with LCD display and Industrial style LED Mimic Diagram
- User configured to operate in the On-line (Inverter preferred) or the Off-line (AC line preferred) mode
- Provides an additional level of redundancy when operated in the On-line Mode
- Plug in modular construction, can be removed or installed with no output interruption during Maintenance Bypass
- Optional RS-232 Communication Port available

AC Power Plant

- Constructed of heavy duty 23” Racks
- Make Before Break Maintenance Bypass Switch provides uninterrupted output during bypass
- AC line Circuit Breaker for overload protection during Static Bypass
- Fully enclosed AC and DC power bus bars, pre-wired to terminal blocks for external connections, simplifies installation
- Docking tray provides easy plug-in and removal of Inverter Module, will accept either a 5 kVA or a 10 kVA module
- Compact design, 25 KVA system is only 24.5” x 29” in foot print and 84” in height
- CSA Certified



*Inverter System as shown above:
25 kVA Single Phase Output*

System Specifications (Subject to change without notice)

DC Input

Nominal	48 V
Range	42 to 60 V
Current	See Table

Inverter System AC Output

Power	See Table
Connection	2 wires + Gnd
Voltage	220 V
Regulation	± 1%
Dynamic:	
100 % step load	± 4%
Recovery	< 8 mSec
Efficiency	84 % to 87%
Distortion (linear load)	< 1.0 % THD
Non Linear Load Capability	Up to 100 %
Active P.F. Corrected Loads	Compatible
Load Power Factor (PF)	0.8
Frequency	50 Hz
Frequency Tolerance	± 0.1 % free running
Synchronization:	
Range	± 1.5 Hz
Rate	1 Hz per Sec

Bypass AC

Connection	2 wires + Gnd
Voltage	220 V
Phase	Single
Frequency	50 Hz

Static Bypass Switch

Transfer Time	2.5 mSec typical 5 mSec maximum
Voltage Tolerance	± 10 %
Frequency Tolerance	± 1.5 Hz
Overload:	120 % for 10 Minutes 1000 % for 8 ms

Environmental

Temperature	0° C to 40° C
Humidity	95 % RH
Cooling	Forced Air with temperature Controlled Fans

Inverter Modules

Output	Model #
5 kVA	HPRI-INV-5K-48-A
10 kVA	HPRI- INV-10K-48-A

Inverter System 48 VDC Input 220 VAC 50 Hz Single Phase Output

Output VA @ 0.8 PF	25,000 VA	30,000 VA	50,000 VA
AC Power Plant + Controller Model #	HPRI 25K-48-A	HPRI 50K-48-A	HPRI 50K-48-A+RA
Inverter Modules Required	1 x 5 kVA +2 x 10KVA	3 x 10 KVA	5 x 10 kVA
AC Output Current	114 Amp AC	136 Amp AC	227 Amp AC
DC Input Current @ 42 V	560 Amp DC	672 Amp DC	448 + 672 Amp DC
AC Power Plant Racks	1	1	2*
Overall Dim. W"xD"xH"	24.5 x 29 x 84	24.5 x 29 x 84	49 x 29 x 84
Total Weight (Net)	1,250 Lbs.	1,350 Lbs.	2,350 Lbs.

N+1 Redundant System 48 VDC Input 220 VAC 50 Hz Single Phase Output

Output VA @ 0.8 PF	20,000 VA N+1	50,000 VA N+1
AC Power Plant + Controller Model #	HPRI 25K-48-A	HPRI 50K-48-A+RA
Inverter Modules Required	3 X 10 KVA	6 x 10 kVA
AC Output Current per Phase	91 Amp AC	227 Amp AC
DC Input Current @ 42 V	448 Amp DC	448 + 672 Amp DC
AC Power Plant Racks	1	2 *
Overall Dim. W"xD"xH"	24.5 x 29 x 84	49 x 29 x 84
Total Weight (Net)	1,350 Lbs.	2,700 Lbs.

* AC Power Plant racks shipped as individual units

Ordering Information:

First determine your power requirement, then select the appropriate **AC Power Plant + Controller** and quantity of **Inverter Modules** from the above tables

For example:

50,000VA output with N+1 redundancy requires

Qty 1	HPRI 50K-48-A+RA
Qty 6	HPRI-INV-10K-48-A

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

Fax: (360) 332-7253

www.philtek.com

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