

# HPRi Series Single Phase 50 Hz Up to 50 kVA 220 Vac Output 120 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"

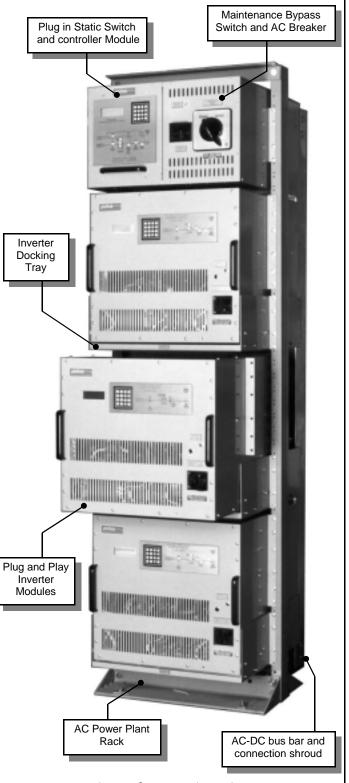
- 5 KVA or 10 KVA output each
- High frequency PWM technology, quiet operation
- Parallel connected with automatic load sharing
- "Hot Pluggable", allows addition or removal of modules without de-energizing the system
- Output compatible with Active Power Factor Corrected AC Loads

## **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, prewired 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



Inverter System as shown above: 25 kVA Single Phase Output

## System Specifications (Subject to change without notice)

145 V

DC Input	
Nominal	
Range	
Current	

120 V	
105 to 14	ķ
See Table	

#### Inverter System AC Output Power See Table Connection 2 wires + Gnd 220 V Voltage Regulation ± 1% Dynamic: ± 4% 100 % step load Recovery < 8 mSec Efficiency 89 % 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 50 Hz Frequency Tolerance ± 0.1 % free running Synchronization: Range ± 1.5 Hz Rate 1 Hz per Sec

#### **Bypass AC**

Connection Voltage Phase Frequency

#### **Static Bypass Switch**

Transfer Time

Voltage Tolerance Frequency Tolerance Overload:

### Environmental

Temperature Humidity Cooling

#### Inverter Modules Output 5 kVA

5 kVA 10 kVA 2 wires + Gnd 220 V Single 50 Hz

2.5 mSec typical 5 mSec maximum ± 10 % ± 1.5 Hz 120 % for 10 Minutes 1000 % for 8 ms

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

#### Model # HPRi-INV-5K-120-A HPRi- INV-10K-120-A

## Inverter System 120 VDC Input 220 VAC 50 Hz Single Phase Output

Output VA @ 1.0 PF	25,000 VA	50,000 VA
AC Power Plant + Controller Model #	HPRi 25K-120-A	HPRi 50K-120-A+RA
Inverter Modules Required	1 x 5 kVA +2 x 10KVA	5 x 10 kVA
AC Output Current	114 Amp AC	227 Amp AC
DC Input Current @ 105 V	268 Amp DC	536 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 )	1,250 Lbs.	2,350 Lbs.

## N+1 Redundant System 120 VDC Input 220 VAC 50 Hz Single Phase Output

Output VA @ 1.0 PF	20,000 VA N+1	50,000 VA N+1
AC Power Plant + Controller Model #	HPRi 25K-120-A	HPRi 50K-120-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 @ 105 V	214 Amp DC	536 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 o	utput with N+1 redundancy requires
Qty 1	HPRi 50K-120-A+RA
Qty 6	HPRi-INV-10K-120-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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