



# HPRi Series 3 Phase 50 Hz 15 to 45 kVA 220/380 Vac Output 220 VDC Modular Inverter System

The Philtek HPRi 3 Phase Modular Inverter System features *expansion* and *redundancy* capabilities.



Inverter System as shown above:  
30 kVA 3 Phase Dual Redundant Output



## The System is comprised of:

### Inverter Modules “Plug and Play”

- 5 or 10 KVA output each, one for each Phase
- Modules are the same as used in the single phase inverter system
- High frequency PWM technology, quiet operation
- “Hot Pluggable”, allows installation or removal of modules without de-energizing the system
- Output compatible with Active Power Factor Corrected AC Loads

### Static Bypass Switch and Controller

- Output power rating self configured, 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
- Docking caddies provide easy plug in and removal of Inverter Modules
- Compact design, 30 KVA system is only 24.5” x 29” in foot print and 84” in height
- **CSA Certified**

# System Specifications *(Subject to change without notice)*

## DC Input

Nominal	220 V
Range	192 to 260 V
Current	See Table

## AC Output

Power	See Table
Connection	4 wires (Y) + Gnd
Voltage	220/380V 3 Phase 50 Hz
Regulation	± 1%
Dynamic Regulation:	
100 % step load	± 4%
Recovery	< 8 mSec
Efficiency	92 %
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 Tolerance	± 0.1 % free running
Overload	120 % for 10 minutes
Synchronization:	
Range	± 1.5 Hz
Rate	1 Hz per Sec

## Bypass AC

Connection	4 wires (Y) + Gnd
Voltage	220/380V 3Phase 50 Hz
Current	Same as output current see Table

## 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

<i>Output</i>	<i>Model #</i>
5 kVA	HPri-INV-5K-220-A
10 kVA	HPri-INV-10K-220-A

## ***Inverter System 220 VDC input 220/380 VAC 50 Hz 3 Phase Output***

Output VA @ 1.0 PF	15,000 VA	30,000 VA	45,000 VA
AC Power Plant + Controller Model #	HPri 45K-220-3A	HPri 45K-220-3A	HPri 45K-220-3A+R3A
Inverter Modules Required	3 x 5 kVA	3 x 10 kVA	3 x 5 KVA + 3 x 10 kVA
AC Output Current per Phase	23 Amp AC	45 Amp AC	91 Amp AC
DC Input Current @ 192 V	85 Amp DC	170 Amp DC	85 + 170 Amp DC
AC Power Plant Racks	1	1	3 *
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 )	990 Lbs.	1,350 Lbs.	2,150 Lbs.

## ***N+1 Redundant System 220 VDC input 220/380 VAC 50 Hz 3 Phase Output***

Output VA @ 1.0 PF	15,000 VA N+1	30,000 VA N+1
AC Power Plant + Controller Model #	HPri 45K-220-3A+R3A	HPri 45K-220-3A+R3A
Inverter Modules Required	6 x 5 kVA	6 x 10 kVA
AC Output Current per Phase	23 Amp AC	45 Amp AC
DC Input Current @ 192 V	85 Amp DC	170 Amp DC
AC Power Plant Racks	2 *	2 *
Overall Dim. W"xD"xH"	49 x 29 x 84	49 x 29 x 84
Total Weight ( Net )	1,930 Lbs.	2,570 Lbs.

\* AC Power Plant shipped disassembled

## 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:

**30,000VA output with N+1 redundancy requires**

Qty 1	HPri 45K-220-3A+R3A
Qty 6	HPri-INV-10K-220-A

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