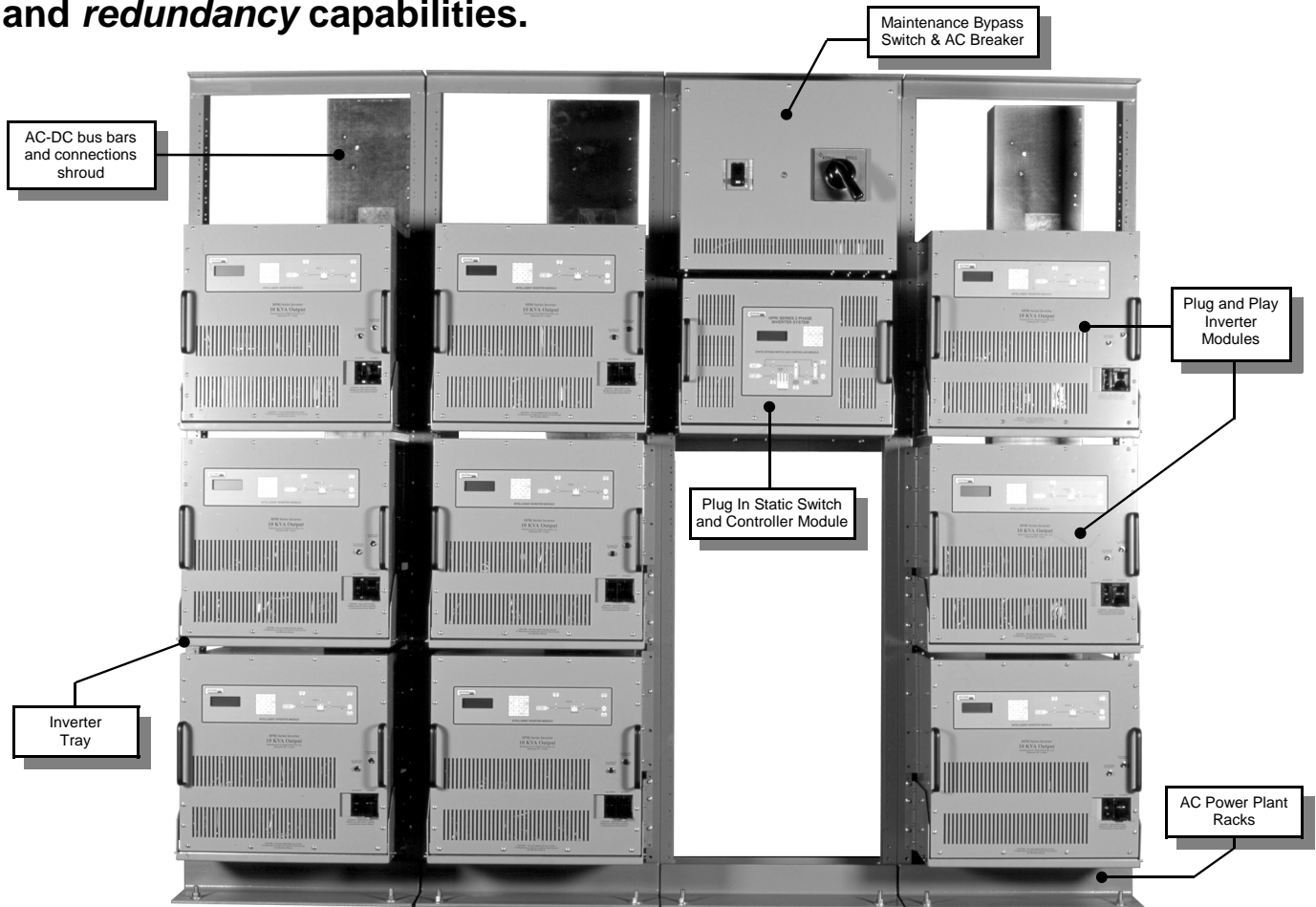




## HPRI Series Modular Inverter System 120 VDC Input 90 kVA to 180 kVA 277/480 VAC 3 Phase 4 Wire Output

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



90 KVA HPRI Inverter System c/o AC Power Plant, Controller and 9 x 10 KVA Inverter Modules

### Inverter Modules "Plug and Play"

- 10 KVA output each
- 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 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
- Inverter docking trays provide easy plug in and removal of Inverter Modules
- **CSA** Certification pending

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

## DC Input

Nominal 120 V  
 Range 105 to 145 V  
 Current See Table

## AC Output

Power See Table  
 Connection 4 wires (Y) + Gnd  
 Voltage 277/480V 3 Phase 60 Hz  
 Regulation  $\pm 1\%$   
 Dynamic Regulation:  
   100 % step load  $\pm 4\%$   
   Recovery < 8 mSec  
 Efficiency 90 % to 92 %  
 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  $\pm 0.1\%$  free running  
 Overload 120 % for 10 minutes  
 Synchronization:  
   Range  $\pm 1.5$  Hz  
   Rate 1 Hz per Sec

## Bypass AC Input

Connection 4 wires (Y) + Gnd  
 Voltage 277/480V 3 Phase 60 Hz  
 Current Same as output current see Table

## Static Bypass Switch

Transfer Time 2 mSec typical  
                   4 mSec maximum  
 Voltage Tolerance  $\pm 10\%$   
 Frequency Tolerance  $\pm 1.5$  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 #*  
 10 kVA 277 Vac 1 $\Phi$  **HPRI-INV-10K-120-E**  
 Weight 320 Lbs

## ***Inverter System 120 VDC input 277/480 VAC 60 Hz 3 Phase Output***

Output VA @ 1.0 PF	90,000 VA	120,000 VA	150,000 VA
*AC Power Plant + Controller Model #	HPRI 180K-120-3E+3R3E	HPRI 180K-120-3E+4R3E	HPRI 180K-120-3E+5R3E
Inverter Modules Required	9 x 10 kVA	12 x 10 kVA	15 x 10 kVA
AC Output Current per Phase	109 Amp AC	145 Amp AC	189 Amp AC
DC Input Current @ 105 V	3 x 318 Amp DC	4 x 318 Amp DC	5 x 318 Amp DC
*AC Power Plant Racks	4	5	6
Overall Dim. W"xD"xH"	98 x 29 x 84	122.5 x 29 x 84	147 x 29 x 84
Total Weight ( Net )	4,205 Lbs.	5,460 Lbs.	6,715 Lbs.

## ***Inverter System 120 VDC input 277/480 VAC 60 Hz 3 Phase Output***

Output VA @ 1.0 PF	180,000 VA	180,000 VA N+1
*AC Power Plant + Controller Model #	HPRI 180K-120-3E+6R3E	HPRI 180K-120-3E+7R3E
Inverter Modules Required	18 x 10 kVA	21 x 10 kVA
AC Output Current per Phase	217 Amp AC	217 Amp AC
DC Input Current @ 105 V	6 x 318 Amp DC	**7 x 318 Amp DC
*AC Power Plant Racks	7	8
Overall Dim. W"xD"xH"	171.5 x 29 x 84	196 x 29 x 84
Total Weight ( Net )	7,970 Lbs.	9,225 Lbs.

\* AC Power Plant shipped disassembled

\*\* The actual maximum total input current is only 1,908 A DC

## 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:

**180,000VA output with N+1 redundancy requires**

Qty 1                   HPRI 180K-120-3E+7R3E  
 Qty 21                HPRI-INV-10K-120-E

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