

True Galvanic isolation design

The ultimate UPS solution – providing uninterrupted power and protection against noise, lightning, and leakage current.

Designed to protect against a floating neutral

Ensures the safety of personnel and UPS.

Advanced digital signal processing

Increased reliability and efficiency through the use of DSP, IGBT and advanced switching components.

Modular design for ease of troubleshooting and maintenance

Quick change components speed repairs and cut down time.

Redundant Multi-CPU design allows the software and hardware to work together as a team

This results in the highest reliability possible.

The most intelligent and safe battery test circuitry available today

- No risk of AC output failure during test of failed batteries
- Maximizes battery bank protection when leakage or a ground fault is present

Individualized inverter support on each phase

Maintains specified characteristics, even with 100% unbalanced load.

Intelligent, fully temperature compensated battery charger

- · Prolongs battery life
- Selectable high charging capacity for largecapacity extended backup time battery banks

Hi-Tech fan speed control

Increases fan life expectancy while reducing audible noise

Optimum design for heat dissipation

The control and power circuits are separated to reduce operating temperature for high reliability under adverse operating conditions.

Battery Power start feature

The unit can be started with or without the AC mains using battery power alone eliminating large surge currents.

A selection of optional accessories to meet your particular needs are available

- Remote control panel
- 3-Phase PC monitoring software
- · Battery monitoring module
- 3-Phase SNMP card
- Emergency Power Off Switch
- Input harmonic filter reduces T.H.D. (Total Harmonic Distortion) of the input current



ETL Certified to UL 1778 up to 160 kVA

Applications

Computer Room
Production Facility
Testing Lab
Telecommunications
Industrial
Government
Public Building
Schools
Healthcare
Cruise & Cargo Ship
Banking
Printing Facility



HOST POWER Specifications

Power Rating: 10, 20, 30, 40, 50, 60, 80, 100, 120, 160 kVA (also available upon request 200, 240, 300, 400, 500 kVA)

Input Voltage:

208Y/I20 V or 480Y/277 VAC (-15% to +15%)

Output Voltages:

208Y/I20 V or 480Y/277 VAC

Output Frequency (Inverter Operation): 60 Hz ±1 Hz

Voltage Regulation: ±1% at 100% unbal-

anced load

Output Voltage Wave Form: Sine-Wave

<2% THD.

Crest Factor: 3:1 Typical

Surge Protection: The UPS will protect itself and the load against surges as defined in ANSI/IEEE C62.41 Catagories A nad B.

Isolation: True galvanic isolated

Battery: Sealed maintenance-free VRLA or Long Life Battery (available upon request)

Recharge Time: Varies per KVA and conforms to UL924, UL1778.

Battery	Sealed Lead Acid VRLA		
No. of batteries	29 (12V)		
Nominal Voltage	348 VDC		
Low Battery Shut Down	295 VDC		
Float Charge	390 VDC		

Environmental:

Humidity: 0 - 90% (non-condensing)

Operating Temperature:

UPS: 0° to 40°C. (32° - 104°F) Battery: 20° to 30°C. (68° - 86°F) higher temperature batteries are available for special order

Storage Temperature: -20° to 60°C. (-4° - 140°F) electronics only.

Altitude: Up to 5,000 ft

Cabinet Size (UPS only):

10-60kVA: 34"W x 63"H x 31.5"D 80-160kVA: 55.5"W x 63"H x 31.5"D 200-320kVA: 86.5"W x 63"H x 31.5"D 400kVA: 133"W x 71"H x 39.5"D 500kVA: 178"W x 71"H x 39.5"D

KVA/KW	Input - Output Voltages	MODEL NUMBERS	Max. Battery (AMP)	BTU/ Hr	**Weights (lbs)	
					UPS	Battery Cab
10 / 8	208/120 - 208/120 480/277 - 480/277	HP010B05ATT3 HP010H09ATT3	348	2218 2218	840 840	Consult Factory for'Specific Battery Runtime
20 / 16	208/120 - 208/120 480/277 - 480/277	HP020B05ATT3 HP020H09ATT3	348	4436 4436	1083 1083	
30 / 24	208/120 - 208/120 480/277 - 480/277	HP030B05ATT3 HP030H09ATT3	348	6483 6483	1260 1260	
40 / 32	208/120 - 208/120 480/277 - 480/277	HP040B05ATT3 HP040H09ATT3	348	8871 8871	1414 1414	
50 / 40	208/120 - 208/120 480/277 - 480/277	HP050B05ATT3 HP050H09ATT3	348	10236 10236	1525 1525	
60 / 48	208/120 - 208/120 480/277 - 480/277	HP060B05ATT3 HP060H09ATT3	348	11942 11942	1724 1724	
80 / 64	208/120 - 208/120 480/277 - 480/277	HP080B05ATT3 HP080H09ATT3	348	15695 15695	2276 2276	
100 / 80	208/120 - 208/120 480/277 - 480/277	HP100B05ATT3 HP100H09ATT3	348	18425 18425	2984 2984	
120 / 96	208/120 - 208/120 480/277 - 480/277	HP120B05ATT3 HP120H09ATT3	348	22178 22178	3138 3138	
160 / 128	208/120 - 208/120 480/277 - 480/277	HP160B05ATT3 HP160H09ATT3	348	29684 29684	3868 3868	
* 200 / 160	208/120 - 208/120 480/277 - 480/277	HP200B05ATT3 HP200H09ATT3	348	39238 39238	5746 5746	
* 240 / 192	208/120 - 208/120 480/277 - 480/277	HP240B05ATT3 HP240H09ATT3	348	44356 44356	6229 6229	
* 300 / 240	208/120 - 208/120 480/277 - 480/277	HP300B05ATT3 HP300H09ATT3	348	55616 55616	7293 7293	
* 400 / 320	208/120 - 208/120 480/277 - 480/277	HP400B05ATT3 HP400H09ATT3	348	78476 78476	9061 9061	
* 500 / 400	208/120 - 208/120 480/277 - 480/277	HP500B05ATT3 HP500H09ATT3	348	98948 98948	10166 10166	

 $^{^{}st}$ Units are available only upon request.

For Voltages other than listed replace

B05 = 208Y/120 I/O B09 = 208Y/120 Input, 480/277 Output H09 = 480Y/277 I/O H05 = 480Y/277 Input, 208Y/120 Ouptut

STANDARD FEATURES

- 6 pulse or 12 pulse controlled rectifier (12 pulse for 80 kVA & up)
- Input main circuit breakers
- Data and events LCD display
- Built-in Transient Voltage Surge Suppressor
- EMI suppression
- PWM methodology (DSP)
- Isolation transformer at output for True galvanic isolation
- Modular design to facilitate ease and speed of service
- Cold start function: UPS can be started with battery power only without an AC source
- Multi-CPU design: Several CPUs are employed in control circuit and critical functions are designed with parallel redundancy for added reliability
- Protection against misuse: circuit breaker on/off sensor, and power supply sensor, the user cannot cause UPS damage by operator error.
- Intelligent charger: UPS will automatically recharge with temperature compensation.
- Intelligent battery test
- Redundant power supply
- RS-232 / RS-485 for varies accessory options
- 8 Dry contacts: INVON,OVL,FAULT, SS, BYPASS, BACK-UP, BATL, COM.
- External Shutdown- two pairs of terminals for UPS shut down
- DB9 Connection-4 of RS-485 & I of RS-232:

The following are some connection examples of optional modules

- CNR21 (RS-232): UPSCOM-Software for PC Monitoring, SNMP card
- CNR9 (RS-485): DCMAN-Battery Monitoring Module
- CNR10 (RS-485): UPSCAN-Remote Control Panel
- CNR12,13,14,15,17,18,19 (RS-485): UPSCALL- Auto Dialing Module
- CNR11: for transferring RS-485 into RS-232

OPTIONS

- Remote control panel UPSCAN™
- Software for PC monitoring UPSCOM™
- Auto dialing module UPSCAN™
- Battery / Battery String Module
- Auxiliary Output Circuit Breaker
 Up to 20, I pole Breaker





