AMPS80 HP

Inverter/Hybrid AC-DC System

AMPS80 HP

- Alpha Modular Power System 80HP Inverter/Hybrid AC-DC System
- High performance AC or hybrid AC/DC backup power system offering 99.999% availability for mission critical indoor applications
- 94% Efficiency, 15 year Design Life and module MTBF (Mean Time Between Failures) greater than 200,000 hours, resulting in class-leading TCO (Total Cost of Ownership)
- Intelligent system controller with integrated SNMP for local and remote management of AC & DC power modules, batteries, and other peripherals
- Hot swappable 2.5kVA/2.0kW AC Power modules & optional 1.8kW rectifier modules offer total flexibility, scalability and low MTTR (Mean Time To Repair)
- Small footprint system offers up to 75kVA/60kW in a single 19" box bay rack, freeing up valuable rack and floor space

Introducing the Alpha Modular Power System 80HP (AMPS80 HP), Alpha's new high performance AC or hybrid AC/DC system offering Telecom grade reliability, 94% efficiency, and high power density. The AMPS80 HP features hot swappable 2.5kVA/ 2.0kW inverter modules and optional 1.8kW rectifier modules that are the building blocks of a highly reliable power system utilizing -48Vdc battery bus. Alpha's smart unified controller with integrated Ethernet/SNMP interface monitors and manages both the AMPS and rectifier modules through a web based GUI and local LCD touch screen. The controller also features Email notification via TCP/IP, user definable alarms and data logging, flexible battery management features, and smart peripheral monitoring features.

The AMPS80 HP meets your current and future power needs by allowing you to purchase only the power modules you need for current needs while having ultimate flexibility to scale up or down, depending on future power needs. Front access and user friendly connections make the system easy to install, easy to service and easy to upgrade. Furthermore, Alpha's hassle-free warranty and comprehensive support network for ordering spare modules make AMPS80 HP a smart and dependable investment decision.

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Consult your Alpha representative for P/N configurations

Standard Features

- Unified system controller with integrated SNMP/Ethernet
- Top AC & DC feed access; bottom DC feed access (All user connections are front access)
- AC input & output breaker/disconnect switch
- Industrial grade surge suppression (rated to 40kA)

Mechanical

Dimensions:
mm: .....2134H x 600W x680D
inches:.....84H x 23.6W x 26.75D
System weight
(without modules): 270kg (595lbs)

Module dimensions:
mm: .....88.9H x 102W x435D
inches:.....3.5H x 4W x 17.13D
Module weight:.....5kg (11lbs)

Clearance:
Front: 100cm (33in)
Rear:.....30cm (12in)
Sides: .....90cm (36in) for 75kVA systems and all systems with TVSS option. No clearance required for other systems
Top:.....30cm (12in)

Environmental

Temperature:
Operating (full load): .....-20 to 40°C (-4 to 104°F)
Storage:.....-40 to 70°C (-40 to 158°F)
Relative humidity: .....Up to 95%, non-condensing
Operating altitude: .....Up to 1500m (4,921ft) above sea level
Thermal Dissipation per
2.5kVA/2kW AMPS module: 437 BTU/hr in AC to AC mode;
758 BTU/hr in DC to AC mode

Options

- Up to 8 x 1.8kW rectifier modules
- Integrated maintenance bypass switch
- Inverter DC input breakers
- Service-entrance grade surge suppression:140kA rating, per phase
- Lockable rack front-door
- Batteries (various sizes and technologies)

Agency Compliance

Safety: .....UL1778 (2nd Ed); CSA C22.2 No. 107.3-05 UPS General Safety
EMC: .....FCC CFR47 Part 15 Class A; ICES-003

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Nominal Specifications				
Model:	**AMPS80-3-75**	**AMPS80-3-30**	**AMPS80-2-40**	**AMPS80-2-20**
P/N	**Consult your Alpha representative for P/N configurations**			
Input & output phase	120/208V 3-ph	120/208V 3-ph	120/240V or 120/208V 2-pole	120/240V or 120/208V 2-pole
Output capacity	7,500 to 75,000VA	7,500 to 30,000VA	5,000 to 40,000VA	5,000 to 20,000VA
Output power (resistive load)	6,000 to 60,000W	6,000 to 24,000W	4,000 to 32,000W	4,000 to 16,000W
Maximum output current	208A rms per phase	83A rms per phase	167A rms per phase	83A rms per phase
Max. no. of 2,500VA/ 2,000W inverter modules	30	12	16	8
Min. no. of 2,500VA/ 2,000W inverter modules	3	3	2	2
Technology	Proprietary high efficiency double conversion technology; each AMPS module has DC input & AC input			
Static switch	Not required; each AMPS module has its own static switch			
Efficiency	94% efficiency in 'HP' mode, 90% efficiency in Battery mode			
Waveform	Pure sine wave			
Output power factor	0.8 (can run capacitive & inductive loads)			
Transfer time	Zero transfer time			
Warranty	2 year standard (1 and 3 year optional extensions)			
AMPS Module AC Output				
Power rating	2,500VA/2,000W			
Voltage (AC)	120V			
Voltage accuracy	±2%			
Frequency	60Hz (same as input frequency)			
Frequency accuracy	0.03%			
Input power factor	>99%			
THD (resistive load)	<1.5%			
Transient load recovery time	0.4ms			
Soft start time	20s			
Maximum crest factor at nominal power	3.5			
Short circuit overload capacity	10 x I_n for 20msec (HP mode)			
Short term overload capacity	150% for 5 seconds			
Permanent overload capacity	110%			
Synchronization range	57 – 63Hz			
AMPS Module DC Input				
Nominal voltage	48Vdc			
Voltage range (max)	40 – 60Vdc (User Adjustable)			
Max. DC Input Current				
@48Vdc	1375A	550A	734A	366A
@40Vdc	1700A	680A	900A	450A
Voltage ripple	<2mV/<38 dbrnc			
Unified System Controller with Integrated SNMP				
Control & monitoring	Configure, control and monitor AMPS & rectifier modules via Internet Explorer 7 onwards			
Display	LCD touch-screen display (160 x 160 pixels) OK/Major/Minor 3-Color LED display Web based GUI via ethernet			
Communication ports	RJ45 ethernet port RS232 Port (Front)			

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For more information visit **www.alpha.ca**

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