

HT X3 100kVA – 200kVA

Alphapower

The HT X3 is a **three-phase in/three-phase out** UPS designed with **on-line double conversion technology** and has filtered and **stabilised sinusoidal output voltage**. It is fitted with input and output filters making it **immune to interference** from power supply lines.

The digital microprocessor controller enables information exchange and ensures that parallel connections are monitored and that the current is balanced. The HT X3's innovative design means that it can be installed in parallel to increase available power, even after the initial unit's installation. The Dual Bus System powers priority loads from 2 independent sources increasing redundancy and availability level of multi-module configuration. Two systems can be merged together for expansion or maintenance at any time.

The ECO mode increases efficiency by up to 98% thus reducing energy dissipation and running costs; this is achieved by using mains as priority for the load and switching load/s to the inverter only when mains characteristics exceed the set parameters.

The X3 has high overload capability, galvanic isolation and low harmonic distortion; all models of the X3 series can also be used as frequency converters (50Hz ↔ 60Hz). UPSMon software displays, in a bar graph, the input/output voltage, load applied, remaining back-up time, etc.

The front mimic panel of the UPS allows access to menu items and information including: status and alarms, control commands, input, output, settings and battery measurements – power, voltage, current frequency and temperature.



The diagnostics system contains up to 128 alarms and messages.

Back feed protection prevents voltage from feeding back into the distribution board in order to keep maintenance personnel safe.

Model	Capacity
HT 100	100kVA
HT 120	120kVA
HT 160	160kVA
HT 200	200kVA

Product Specifications

	Model	HT 100	HT 120	HT 160	HT 200	
	Continuous Output Power	100kVA	120kVA	160kVA	200kVA	
Input	Rated Voltage	400V _{AC} Three-phase + N				
	Voltage Range	± 20%				
	Frequency Range	50/60Hz ± 5Hz				
	Soft Start	0-100% in 10sec				
	Technology	On-line, double conversion AND line-interactive				
	Power Factor	> 0.9 in HT Clean version				
	Harmonic Distortion	< 5% in HT Clean version				
Output	Rectifier	Output Ripple	< 1%			
		Maintenance Voltage	Varies according to temperature			
	Efficiency	> 93%				
	Inverter	Rated Power	80kW	96kW	128kW	160kW
		Phases	Three + N			
		Rated Voltage	400V 3-phase - configurable			
		Rated Current	145A	174A	230A	290A
		AVR	348/424 V - configurable			
		Crest Factor	3:1			
		Waveform	Sinusoidal			
		Static Stability	± 1%			
		Dynamic Stability	± 5% in 5ms			
		Frequency	50/60Hz - configurable			
		Overload	110% for 5h / 125% for 10min / 150% for 1min			
		Frequency Stability	± 0.05% (mains failure) / ± 2% (selectable ± 1 – 5% with mains supply)			
Bypass & Protection		Back Feed Protection	YES			
	Rated Voltage	400V _{AC} Three-phase				
	Voltage Range	Set: ± 15% Selectable: Between ± 10% & ± 20%				
	Rated Frequency	50/60Hz (Auto sensing)				
	Circuit Breaker	YES				
	Shutdown	Auto shutdown programmable for prolonged black-out				

	Type	Maintenance-free lead acid, VRLA AGM/GEL, NiCd			
Battery	Max. Recharge Current	0.2 x C 10			
	Internal Batteries	NO			
	Protection	Periodic self-test, Protection against deep discharge, Recharge temperature compensation			
	Net Weight Kg (lbs.)	756 (1666.7)	901 (1986.4)	1300 (2866)	1360 (2998.3)
	Dimensions (mm)	1070 x 745 x 1400		1420 x 745 x 1800	
	W x D x H	42.1" x 29.3" x 55.1"		55.9" x 29.3" x 70.9"	
	Colour	Light grey RAL 7035			
Physical	Display	Status LEDs / Status LEDs & LCD			
	Expandable	YES – up to 8 units synchronised using UGS (UPS Group Synchroniser)			
	RS232	YES			
	Remote Controls	EPO and bypass contacts			
	Dry Contacts	YES			
	LED	YES			
	LCD	YES			
Alarm	Audible	YES			
	Operating Temperature	0 – 45°C			
	Relative Humidity	0 – 95% non-condensing			
Environment	Noise	< 60dBA (1 metre from surface)			
Compliance	Protection Rating	IP20			
	Safety	EN 62040-1 EMC EN 62040-2 Directives 73/23 – 93/68 – 89/339 EC EN 62040-3			

OPTIONS	Empty Battery Cabinets	X	X	X	X
	Parallel Kit	X	X	X	X
	LCD-based Remote Control Panel	X	X	X	X
	LED-based Remote Control Panel	X	X	X	X
	MultiCom 351	X	X	X	X
	MultiCom 301	X	X	X	X
	Netman 101Plus	X	X	X	X
	Multi I/O	X	X	X	X
	IRMS Multi-switch	X	X	X	X
	AS/400 Interface	X	X	X	X
	UPS Remote Contacts Expander	X	X	X	X
	UPS Group Synchroniser	X	X	X	X
	Power System Joiner	X	X	X	X
	MultiCom 401	X	X	X	X