

HT X3 10kVA – 80kVA

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 10	10kVA
HT 15	15kVA
HT 20	20kVA
HT 30	30kVA
HT 40	40kVA
HT 60	60kVA
HT 80	80kVA

Product Specifications

Model		HT 10	HT 15	HT 20	HT 30	HT 40	HT 60	HT 80	
Continuous Output Power		10kVA	15kVA	20kVA	30kVA	40kVA	60kVA	80kVA	
Input	Rated Voltage	400V _{AC} Three-phase + N							
	Voltage Range	± 20%							
	Frequency Range	50/60Hz ± 5Hz							
	Soft Start	0-100% on 10"							
	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		> 92%			> 93%		
	Inverter	Rated Power	8kW	12kW	16kW	24kW	32kW	48kW	64kW
		Phases	Three + N						
		Rated Voltage	400V						
		Rated Current	14A	22A	29A	43A	58A	87A	115A
		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% of rated for 5h / 125% of rated for 10min / 150% of rated for 1min						
		Frequency Stability	± 0.05% on mains failure / ± 2% - selectable between ± 1% and ±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	Maximum Recharge Current	0.2 x C 10						
	Internal Batteries	YES	YES	YES	YES	NO	NO	NO
	Protection	Periodic self-test Protection against deep discharge Recharge temperature compensation						
	Net Weight Kg (lbs.)	223 (492)	260 (573)	260 (573)	336 (741)	361 (796)	497 (1096)	556 (1226)
Physical	Dimensions (mm)	555 x 725 x 1220					800 x 745 x 1400	
	W x D x H	21.8" x 28.5" x 48.0"					31.5" x 29.3" x 55.1"	
	Colour	Light grey RAL 7035						
	Display	Status LEDs / Status LEDs & LCD						
	Expandable	YES – up to 8 units synchronised using UGS (UPS Group Synchroniser)						
Interface	RS232	YES						
	Remote Controls	EPO and bypass contacts						
	Dry Contacts	YES						
Alarm	LED	YES						
	LCD	YES						
	Audible	YES						
Environment	Operating Temperature	0 – 45°C						
	Relative humidity	0 – 95% non-condensing						
	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	X	X	X
	Parallel Kit	X	X	X	X	X	X	X
	LCD-based Remote Control Panel	X	X	X	X	X	X	X
	LED-based Remote Control Panel	X	X	X	X	X	X	X
	MultiCom 351	X	X	X	X	X	X	X
	MultiCom 301	X	X	X	X	X	X	X
	Netman 101Plus	X	X	X	X	X	X	X
	Multi I/O	X	X	X	X	X	X	X
	IRMS Multi-switch	X	X	X	X	X	X	
	AS/400 Interface	X	X	X	X	X	X	X
	UPS Remote Contacts Expander	X	X	X	X	X	X	X
	UPS Group Synchroniser	X	X	X	X	X	X	X
	Power System Joiner	X	X	X	X	X	X	X
	MultiCom 401	X	X	X	X	X	X	X