

Working in Power

ZP110

on-line UPS

1, 2, 3, 6, 10kVA single/single phase

- LOCAL AREA NETWORKS (LAN)
- SERVERS
- DATA CENTERS
- INTERNET CENTERS (ISP/ASP/POP)
- INDUSTRIAL PLCS
- EMERGENCY DEVICES (LIGHTS/ALARMS)
- ELECTRO-MEDICAL DEVICES
- TELECOMMUNICATIONS DEVICES
- INDUSTRIAL APPLICATIONS

ZP110 on-line UPS

G-TEC is proud to introduce the latest DSP true on-line double conversion UPS for protecting small and medium sized mission critical & IT loads so as to safeguard your valuable equipment and critical data from any abnormal power disturbances, such as surges, blackouts and lightning strikes.

ZP110 power capacity is available in 1-2-3-6-10 kVA



ZP110 is fully digital signalling processor (DSP) controlled to provide quality supply, reduces the number of components and hence increase reliability and improve performance.



1kVA, 2kVA & 3kVA Design Features:

- User friendly mimic panel, with large screen LCD, LED and control push button
- Designed with maximum efficiency at output power factor 0.9
- Full DSP controlled, precision control and high reliability
- Wide input voltage range from 110V to 300V can accommodate the worst voltage fluctuation
- Generator compatible, excellent PFC performance with input power factor close to unity (0.99)
- Optional battery extended socket, for long battery backup time
- Optional communication slot for optional SNMP card; AS400 Dry Contact Card, SMART RS232 for configuration
- Cold start function
- Automatic self test function during start up
- Software for multi OS for remote monitoring and progressive shutdown software

ZP110 6kVA & 10kVA adopted a DSP micro-processor and further provide optional cards for parallel operation.

The main advantage of parallel configuration is to increase overall UPS power availability and system redundancy against power failure and emergency.

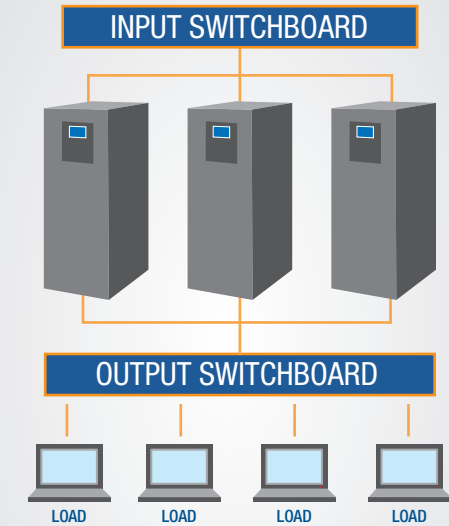
The topology is to connect two or three identical UPS in parallel to expand UPS capability.



6kVA & 10kVA Design Features:

- User friendly mimic panel, with large screen LCD, LED and control push button
- Designed with maximum efficiency at output power factor 0.9
- Full DSP controlled, precision control and high reliability
- Wide input voltage range from 120V to 274V can accommodate the worst voltage fluctuation
- Generator compatible, excellent PFC performance with input power factor close to unity (0.99)
- Optional battery extended socket, for long battery backup time
- Optional communication slot for optional SNMP card; AS400 Dry Contact Card, SMART RS232 for configuration
- Cold start function
- Automatic self test function during start up
- Parallel up to 3 UPS for 6kVA & 10kVA
- Software for multi OS for remote monitoring and progressive shutdown software

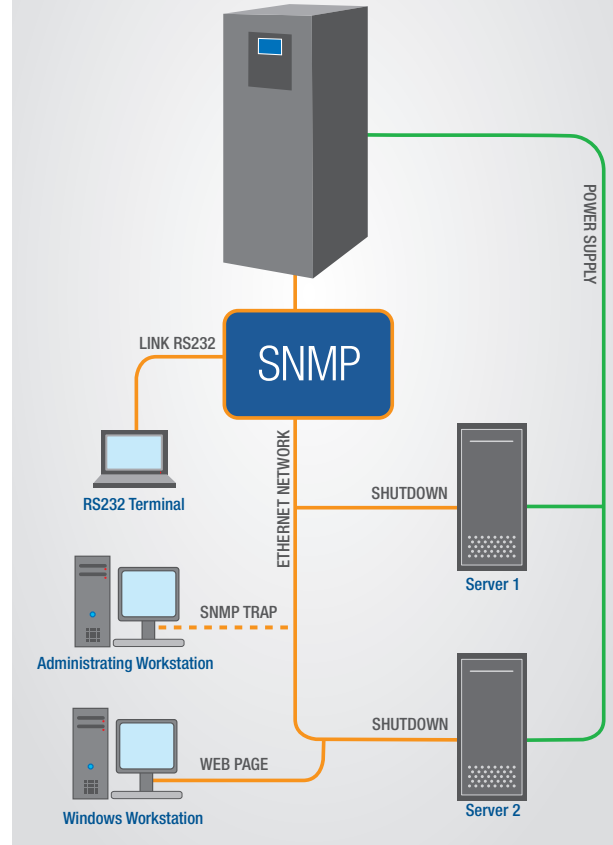
Parallel Redundancy



ZP110 LCD 6kVA to 10kVA UPS in parallel configuration to meet most demanding power requirement. Increase power availability and flexibility.

Parallel Redundancy feature provides economic power solution for system integration. Furthermore, parallel redundancy feature equally share the load to maximise UPS performance, and more secure UPS continuous operation.

Direct Connection with Ethernet Network



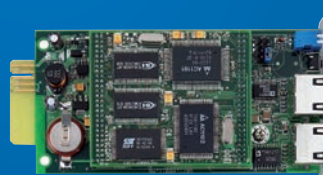
Communication and Power Management Solutions

UPSilon 2000 CD is packed with UPS. It has the function of remote monitor and control UPS through LAN, warning notifications through broadcast and mobile phone, multi-shutdown PCs, and schedule UPS self-test. This unique software provides complete power protection for computer system during power failure. The software support lots of O/S including Windows family, Linux, Sun Solaris 7/8/9, Compaq True64, FreeBSD, IBM Aix 4.3x, 5.1x, and HP-UX 11.x. More than that, to offer increased benefits for our customers, we have also released USB version Mac version on the Internet.

- Power flow display for monitoring UPS status
- Scheduled system shutdown/restart
- Scheduled UPS test
- Warning notification via E-mail/Pager
- Warning notification via Broadcast
- Remote monitor / Control via LAN
- Multi-language versions: English, Germanic, French, Italian, Spanish, Portuguese and Chinese
- Selectable User Interface (Background)
- UPS Parameter setting
- Record logs for analysis
- Multi-OS supported:
Windows family; Linux; Sun Solaris 7/8/9; IBM AIX 4.3x, 5.1x; Compaq True64; HP Unix; FreeBSD; HP-UX 11.x and MAC



Software support most OS for remote monitor and control UPS through LAN, warning notifications through broadcast and



mobile phone , multi-shutdown PCs, and schedule UPS self-test. This unique software provides complete power protection for computer system during power failure

TECHNICAL **ASSISTANCE** SERVICE

UPService, our technical assistance facility uses highly trained engineers to provide a reliable and competent technical support and after-sales service.

UPService can provide customers with:

- **A dedicated CALL CENTRE** for connection to the UPService organisation. UPService personnel are always available and ready to provide advice and assistance regarding UPS installation, maintenance, fault finding and repair.
- **FAST & READY** A fast repair on site is guaranteed through the use of state-of-the-art UPS technology and the professionalism of the UPService personnel and Authorised Assistance Centres. UPService guarantees that failed parts are replaced with original ones, tested and updated in order to maintain the safety, reliability and operating characteristics of the UPS.
- **COMMISSIONING AND START-UP** UPService can provide assistance during commissioning and startup of the UPS equipment on-site with additional training during handover to site personnel. UPService engineers can also verify site suitability, analyse and advise on potential problems, and disconnect and relocate equipment. UPService recommend that all hardwired installations are commissioned by UPService engineers.
- **MAINTENANCE CONTRACTS** can be provided by UPService to minimise response times and repair costs. Contracts range from periodic inspections to comprehensive cover including labour and materials.
- UPService organises regular **TECHNICAL TRAINING COURSES** for UPS operators and installers.



TECHNICAL **ASSISTANCE** SERVICE

ZP110 on-line UPS

TECHNICAL SPECIFICATIONS			
MODEL	ZP110, 1K LCD	ZP110, 2K LCD	ZP110, 3K LCD
Power Rating (PF0.9)	1kVA/ 0.9kW	2kVA/ 1.8kW	3kVA/ 2.7kW
INPUT			
Voltage	200V / 208V/ 220V / 230V / 240V		
Input low/ high voltage threshold (Dependent on output load rate)	Load 71% to 100% - Battery starts backup at AC 160V \pm 5V Load 66% to 70% - Battery starts backup at AC 150V \pm 5V Load 56% to 65% - Battery starts backup at AC 130V \pm 5V Load \leq 55% - Battery starts backup at AC 110V \pm 5V Nominal load - Battery starts backup at AC 300V \pm 5V		
Rated frequency	40Hz – 60Hz (adjustable)		
Input power factor	0.99		
BATTERY / CHARGER			
Battery type	Sealed lead acid maintenance free type		
Backup time @ typical load	8mins to 15mins depending on load		
Optional EX charger current	6.5Adc	5.5Adc	
OUTPUT			
Voltage	200V/ 208V/ 220V / 230V / 240V**		
Voltage stability	\pm 2%		
Voltage distortion	\leq 4% at linear load		
Frequency	50Hz / 60Hz (synchronizing up to \pm 8%)		
Frequency at free running	50Hz \pm 0.2Hz		
Output waveform	Sinusoidal		
Overload	105% - 125% for 10sec; >125% for 300msec. (Transfer to Bypass eventually)		
Efficiency	>85%		
DISPLAY / INTERFACE			
LCD Display	AC/ DC voltages; kVA/ kW; Frequency; Temperature; Battery & load level		
LED Status Indicator	Utility power; Battery discharge; Inverter On		
External Communication	RS232 / RJ11 / Optional Intelligent Slot		
Control	3 control push button for POWER ON / POWER OFF / FUNCTION KEY		
Communication software	Windows XP/ 2003; Linux; Unix		
Optional	SNMP Card/ USB Card/ Dry Contact AS400 Card/ CMC Card/ RS485 Card/ EMD Monitoring Device		
PHYSICAL DATA			
Dimension (L x D x H) mm	144 x 350 x 230	190 x 328 x 425	
Weight with battery (kg)	11.5	22.2	27.5
Weight w/o battery, EX version	6	10	11
Operating temperature	0°C to 40°C		
Relative humidity	Up to 90% non condensing		
Audible noise @ 1m (dBA)	\leq 45dBA	\leq 50dBA	
STANDARD			
EMC	IEC 61000-4-2 Level 4/ IEC6100-4-3 Level3 / IEC61000-4-4 Level 4 / IEC 61000-4-5 Level 4 / EN55022 Class A		
Safety	IEC62040-1		

* Note: UPS specification and data may be subjected to change for improvement without prior notice

** Load shall derate 10% for output 200V & 208V

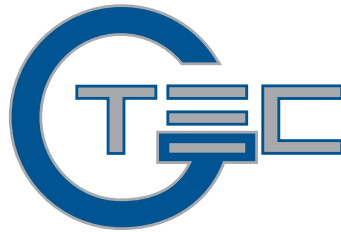
ZP110 on-line UPS

TECHNICAL SPECIFICATIONS		
MODEL	ZP110, 6K LCD	ZP110, 10K LCD
Power Rating (PF0.9)	6kVA/ 5.4kW	10kVA/ 9kW
INPUT		
Voltage	200V / 208V / 220V / 230V / 240V	
Input low/ high voltage threshold (Dependent on output load rate)	Load 81% to 100% - Battery starts backup at AC 160V ±5V Load 50% to 80% - Battery starts backup at AC 150V ±5V Load ≤50% - Battery starts backup at AC 120V ±5V Nominal load - Battery starts backup at AC 274V±5V	
Rated frequency	40Hz – 60Hz (adjustable)	
Input power factor	0.99	
BATTERY / CHARGER		
Battery type	Sealed lead acid maintenance free type	
Backup time @ typical load	8mins to 15mins depending on load	
Optional EX charger current	4Adc	
OUTPUT		
Voltage	200V / 208V / 220V / 230V / 240V**	
Voltage stability	±1%	
Voltage distortion	≤2% at linear load	
Frequency	50Hz / 60Hz (synchronizing up to ±8%)	
Frequency at free running	50Hz ±0.1Hz	
Output waveform	Sinusoidal	
Overload	105% - 115% for 40sec; 115% - 125% for 20sec; >125% for 300msec	105% - 115% for 40sec; 115% - 125% for 30sec; >125% for 300msec
Efficiency	>90%	
DISPLAY / INTERFACE		
LCD Display	AC/ DC voltages; kVA/ kW; Frequency; Temperature; Battery & load level	
LED Status Indicator	Utility power; Battery discharge; Inverter On	
External Communication	RS232 / RJ11 / Optional Intelligent Slot	
Control	3 control push button for POWER ON / POWER OFF / FUNCTION KEY	
Communication software	Windows XP/ 2003; Linux; Unix	
Optional	SNMP Card/ USB Card/ Dry Contact AS400 Card/ CMC Card/ RS485 Card/ EMD Monitoring Device	
PHYSICAL DATA		
Dimension (L x D x H) mm	260 x 560 x 717 (Standard) / 260 x 533 x 501 (Ex version)	
Weight with battery (kg)	68.5	80
Weight w/o battery, EX version	21	23
Operating temperature	0°C to 40°C	
Relative humidity	Up to 95% non condensing	
Audible noise @ 1m (dBA)	≤55	≤60
STANDARD		
EMC	IEC 61000-4-2 Level 4/ IEC6100-4-3 Level3 / IEC61000-4-4 Level 4 / IEC 61000-4-5 Level 4 / EN55022 Class B	
Safety	IEC62040-1	

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** Load shall derate 10% for output 200V / 208V

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Working in Power

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