Working** in **Power

ZP**120**LCD

online UPS

1,2,3,6,10,15,20 kVA

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

ZP120LCD

G-TEC is proud to introduce the upgraded superior **ZP120LCD UPS** that can deliver clean, safe and regulated power supply to protect your critical mission equipment, so as to safeguard your valuable equipment and critical data from any abnormal power disturbances, such as surges, blackouts and lightning strikes.

ZP120LCD UPS power capacity is available from **1kVA to 3KVA**; and **6kVA to 20kVA**.

1kVA to 3kVA

Design Feautures:

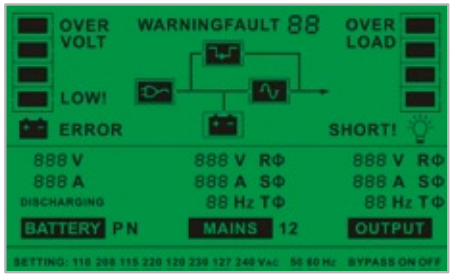
1kVA to 3kVA ZP120LCD UPS
- Microprocessor Control Guarantees High Reliability
- PWM Technology with IGBTs
- Wide Input Voltage Range, up to115V to 300V
- Communication Ports Selectable: Smart RS-232 and Intelligent Slot for AS-400, and SNMP Card
- Free Download power monitoring software from the Internet for Monitoring UPS Status
- Optional External Battery Socket Available for Extended Backup Time
- Cold Start Function
- Remote EPO control
- Auto Self-testing System while Turning on the UPS
- Standard compliance:

EN62040-1-1 (Safety)
EN50091-2 Class B (Conducted Emission)
EN50091-2 Class B (Radiated Emission)
EN61000-3-2 (Harmonic Current)
EN61000-3-3 (Voltage Fluctuations and Flicker)
EN61000-4-2 Level 4 (ESD)
EN61000-4-3 Level 3 Electromagnetic fields
EN61000-4-4 Level 4 (EFT)
EN61000-4-5 Level 4 (Lightning surge)
EN61000-2-2 (Immunity to low frequency signals)

ZP120LCD

ZP120LCD 6kVA to 20kVA adopted a DSP micro-processor and further provide "parallel redundancy" feature: The main advantage of parallel redundancy is capability integration and extra protection against power failure. The topology is two or three equal UPS connected in parallel to expand UPS capability.

User Friendly Display Panel



6kVA to 20kVA

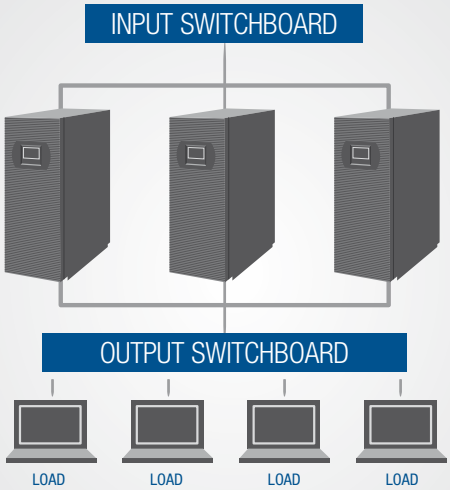
Design Feautures:

6kVA to 20kVA ZP120LCD UPS
Microprocessor Control Guarantees High Reliability

- PWM Technology with IGBTs
- Wide Input Voltage Range, up to176V to 276V (1Ø input) & 304V to 476V (3Ø input)
- Communication Ports Selectable: Smart RS-232 and Intelligent Slot for AS-400, and SNMP Card
- Free Download power monitoring software from the Internet for Monitoring UPS Status
- Optional External Battery Socket Available for Extended Backup Time
- Cold Start Function
- Remote EPO control
- Backfeed protection
- Auto Self-testing System while Turning on the UPS
- Maintenance bypass switch and DSP technology
- Two-Step Intelligent Charging Mode
- N + X Parallel Redundancy and Capacity Expansion
- Standard compliance:

IEC 61000-4-2 Immunity: Electro Static Discharge (ESD)
IEC 61000-4-3 Immunity: electromagnetic fields;
IEC 61000-4-4 Immunity: transient over voltages (BURST);
IEC 61000-4-5 Immunity: current surges (Surge);
IEC 62040-2 Class B - Uninterruptible power supply systems (UPS): performance provisions and test procedures >25A

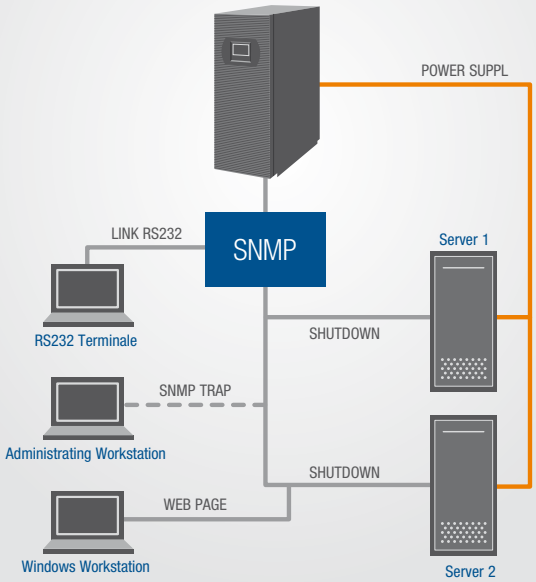
Parallel Redundancy



ZP120LCD 6kVA to 20kVA 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 maximize UPS performance, and more secure UPS continuous operation.

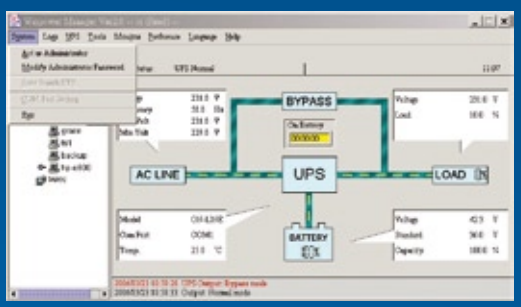
Direct Connection with Ethernet Network



Communication and Power Management Solutions

WinPower CD is packed with UPS, and can also be downloaded from the Internet. 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 supports 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
- Password security protection
- 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, FressBSD, HP-UX 11.x and MAC



SNMP Network Card allows management of UPS across LAN using any of the main network communication protocols - TCP/IP and network interface via SNMP

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.

- The TELEGUARD software package provides remote 24x7 UPS supervision. TeleGuard can interrogate G-TEC UPS connected to a local telephone line to check on their operating logs and system status. Should the UPS report an alarm condition, the UPService Call Centre is immediately notified and a dedicated customer response activated. Routine site reports can be sent automatically to customer personnel.

- UPService organises regular TECHNICAL TRAINING COURSES for UPS operators and installers.

TECHNICAL **ASSISTANCE** SERVICE

ZP120LCD

1kVA to 3kVA

TECHNICAL SPECIFICATION			
MODEL	ZP120LCD 1K	ZP120LCD 2K	ZP120LCD 3K
POWER RATING	1kVA/0.7kW	2kVA/1.4kW	3kVA/2.1kW
INPUT			
Voltage	220V/ 230V/ 240V		
AC High / Low Volt threshold (*dependent on output load percentage*)	80% to 100% load - battery backup at AC mains 160V±5V; 70% to 80% load - battery backup at AC mains 140V±5V; 60% to 70% load - battery backup at AC mains 120V±5V; 0% to 60% load - battery backup at AC mains 110V±5V; Normalise when AC mains 175V±5V; Input high voltage - battery backup at AC mains 300V±5V; Normalise when AC mains 285V±5V;		
Frequency	46Hz ~ 54Hz		
Power Factor	≥ 0.95		
BATTERY / Charger			
Type	Sealed lead acid maintenance free type		
Backup Time @ Typical Load	8 mins	12 mins	8 mins
***Optional** EX charger current	7Adc	9.6Adc	
OUTPUT			
Voltage	220V / 230V/ 240V		
Voltage stability	± 2%		
Crest Factor	3:1		
Voltage Distortion	≤ 3%		
Frequency (synchronise mode)	50Hz ± 2%		
Frequency (battery mode)	50Hz ± 0.2%		
Output waveform	Sinusoidal		
Overload	110% ~ 150% for 30sec before transfer to bypass; >150% for 300ms transfer to bypass		
Efficiency	85%		88%
DISPLAY / INTERFACE			
Status & Indication	Input Healthy /Battery Discharge /Inverter Operation /Bypass Operation /UPS Fault / load Level Status /Battery Capacity Status /measures		
Audible alarm	YES		
Control	UPS On/Off switch; Bypass transfer / Re-transer button / remote EPO		
Communication Software	RS232 Serial port. Software support: WIN 98/NT/2K/XP/2003ME; Linux; Sun Solaris;		
Optional	SNMP Card for power management from SNMP manager and web browser		
PHYSICAL DATA SHEET			
Dimension (L x D x H) mm	145x400x220	192x460x340	
Weight with batteries (kg)	14	35	36
W/o batt. with EX charger (kg)	7	15	16
Operating Environment	0°C ~ 40°C		
Relative Humidity	20% ~ 90% non-condensing		
Audible Noise level (@ 1m)	< 45 dBA	< 50 dBA	

* UPS fitted with optional EX charger is without internal batteries.

Note: UPS specification and data may subject to change for improvement wothout prior notice.

ZP120LCD

6kVA to 20kVA

TECHNICAL SPECIFICATION					
MODEL	ZP120LCD 6K	ZP120LCD 10K	ZP120LCD 10K	ZP120LCD 15K	ZP120LCD 20K
POWER RATING	6kVA/4.2kW	10kVA/7kW		15kVA/10.5kW	20kVA/14kW
INPUT					
Voltage	220V/ 230V/ 240V		380V/ 400V/ 415V		
Voltage threshold	Battery backup @ low mains: 176V±3% Return from low mains: 185V±3% Battery backup @ hi mains: 276V±3% Return from hi mains: 266V±3%		Battery backup @ low mains: 304V±3% Return from low mains: 322V±3% Battery backup @ hi mains: 478V±3% Return from hi mains: 461V±3%		
Frequency	46Hz to 54Hz				
Power Factor	≥ 0.98		≥ 0.95		
BATTERY					
Battery	In built sealed lead acid battery		Not fitted		
Backup Time @ Typical Load	10 mins	8 mins	Dependent on external battery size		
***Optional** EX charger current (without battery fitted)	4.2Adc		4.2Adc standard		
OUTPUT					
Voltage	220V / 230V/ 240V				
Voltage stability	± 1%				
Crest Factor	3:1				
Voltage Distortion	≤ 2% (linear load)				
Frequency (synchronise/batt.mode)	46Hz to 54Hz (synchronise) / 50Hz ± 0.1%				
Load power factor	Support PF from 0.65 lag to 1				
Output waveform	Sinusoidal				
Transient respond/recovery	≤5% (50% !í 100% !í 50%) within 60ms				
Overload	Transfer to bypass: 105% - 130% for 10mins; >130% for 1sec				
Efficiency	>88%				
DISPLAY / INTERFACE					
Status & Indication	Input Healthy /Battery Discharge /Inverter Operation /Bypass Operation /UPS Fault / load Level Status /Battery Capacity Status /measures				
Audible alarm	YES				
Control	UPS On/Off switch; Bypass transfer / Re-transer button / remote EPO				
Communication Software	RS232 Serial port. Software support: WIN 98/NT/2K/XP/2003ME; Linux; Sun Solaris;				
Optional	SNMP Card for power management from SNMP manager and web browser				
PHYSICAL DATA SHEET					
Dimension (L x D x H) mm	260x570x717				
Weight with batteries (kg)	90	93	NA		
W/o batt. with EX charger (kg)	35	38	39	55	56
Operating Environment	0°C ~ 40°C				
Relative Humidity	20% ~ 90% non-condensing				
Audible Noise level (@ 1m)	< 55 dBA			< 55 dBA	

Note: UPS specification and data may subject to change for improvement wothout prior notice.