Uninterruptible Power Supply Systems

Global Technology
and Energy Company

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

ZP120 on-line UPS

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

G-TEC is proud to introduce the upgraded superior ZP120 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.

ZP120 UPS power capacity is available from 1kVA to 3KVA; and 6kVA to 20kVA.

ZP120, 1kVA UPS Rear View

ZP120 UPS
1kVA to 3kVA
Design Features

- 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
- 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)

ZP120 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.

ZP120 UPS

6kVA to 20kVA
N+1 Design Features

- 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
- 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:

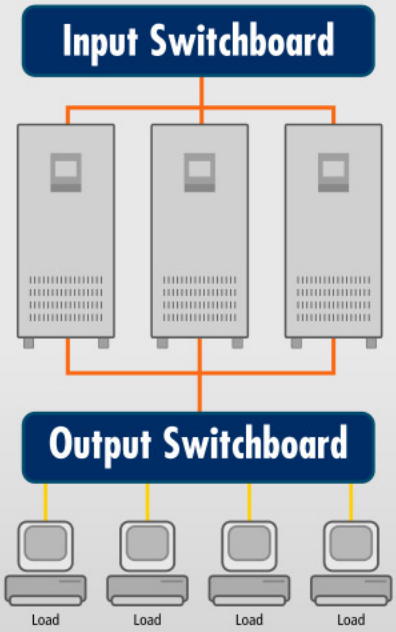
  IEC 61000-4-2 Immunity: Electro Static Discharge (ESD);

  IEC 61000-4-3 Immunity: electromagnetic fields;

  IEC 61000-4-4 Immunity: transient over voltages (BURST);

  IEC 61000-4-5 Immunity: current surges (Surge);

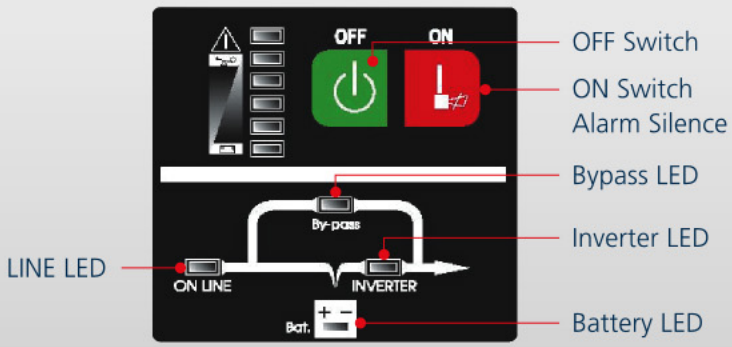
  IEC 62040-2 Class B - Uninterruptible power supply systems (UPS): performance provisions and test procedures >25A



ZP120 6kVA to 20kVA UPS
in parallel configuration to meet most demanding power requirement. Increase power availability and flexibility.

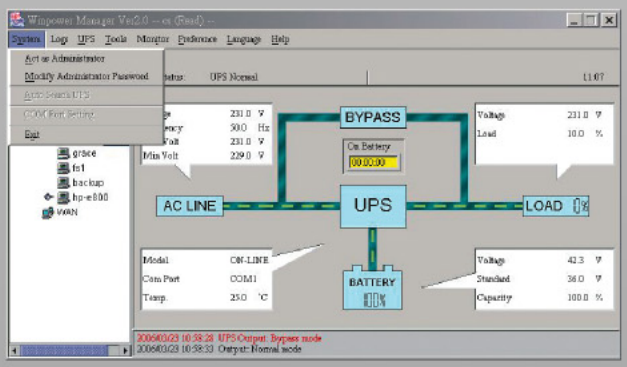
Parallel Redundancy feature provides economic power solution for system integration. Furthermore, parallel redundancy feature equally share the load to maximize UPS performance, and more secure UPS continuous operation.

User Friendly Display Panel

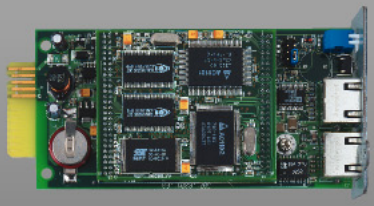


Communication and Power Management Solutions

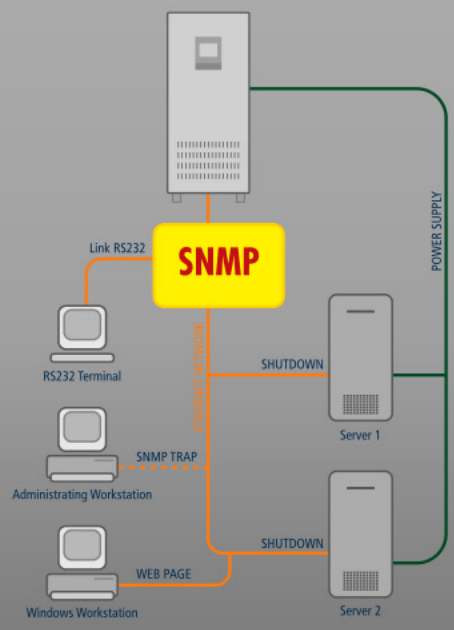
WinPower CD is packed with UPS, and can also be downloaded from the Internet. It has the function of remote monitor and control UPS through LAN, warning notifications through broadcast and mobile phone, multi-shutdown PCs, and schedule UPS self-test. This unique software provides complete power protection 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.



DIRECT CONNECTION WITH ETHERNET NETWORK

ZP120 On-line UPS : 1kVA to 3kVA

Technical Specification			
MODEL	**ZP120** 1K	**ZP120** 2K	**ZP120** 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 mains160V±5V; 70% to 80% load - Battery backup at AC mains140V±5V; 60% to 70% load - Battery backup at AC mains120V±5V; 0% to 60% load - Battery backup at AC mains110V±5V; Normalise when AC mains 175V± 5V Input high voltage - Battery backup at AC mains300V±5V; Normalise when AC mains 285V± 5V		
Frequency	46 Hz ~ 54 Hz		
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		
Audible alarm	YES		
Control	UPS On/ Off switch; Bypass Transfer/ Re-transfer button		
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	145 x 400 x 220	192 x 460 x 340	
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 without prior notice

ZP120 On-line UPS : 6kVA to 20kVA

Technical Specification					
MODEL	**ZP120** 6K	**ZP120** 10K	**ZP120** 10K	**ZP120** 15K	**ZP120** 20K
POWER RATING	**6kVA / 4.2kW**	**10kVA / 7kW**		**15kVA / 10.5kW**	**20kVA / 14kW**
INPUT					
Input voltage	220V / 230V / 240V		380V / 400V/ 415V		
Input 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%		
Input frequency	46Hz to 54Hz				
Input power factor	≥ 0.98		≥ 0.95		
BATTERY					
Battery	In built sealed lead acid battery		Not fitted		
Back up 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 / battery mode	46Hz to 54 Hz (synchronise) / 50Hz ± 0.1%				
Load power factor	Support PF from 0.65 lag to 1				
Output waveform	Sinusoidal				
Transient respond/ Recovery	≤ 5% (50% →100%→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				
Audible alarm	YES				
Control	UPS On/ Off switch; Bypass Transfer/ Re-transfer button				
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	260 x 570 x 717				
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)	<55dBA			<55dBA	

Note: UPS specification and data may subject to change for improvement without prior notice