

# ZP120N Online UPS

1,2,3,6,10,20 kVA  
single/single-phase and three/single-phase



- + HIGH POWER INTENSITY
- + STRONGEST PERFORMANCE
- + FLEXIBILITY
- + HIGH EFFICIENCY WITH LOW HEAT DISSIPATION
- + EXTENDABLE AUTONOMY



# Product Overview



1 kVA - 3 kVA

6 kVA - 10 kVA 1/1  
10 kVA 3/1C

10 kVA 3/1  
20 kVA 3/1

## AREA OF APPLICABILITY:

- + SERVERS
- + INTERNET CENTERS
- + INDUSTRIAL APPLICATION
- + EMERGENCY DEVICES\*
- + MEDICAL DEVICES\*

**ZP120N UPS** model is designed to deliver clean, safe and regulated power, thus protecting your equipment and data from line disturbances such as power surges, blackouts and lightning.

The **ZP120N UPS** is available the following power capacities: 1kVA to 3kVA 1/1; 6kVA - 10kVA 1/1 (single phase input and output) and 10kVA 3/1 and 20kVA 3/1 (three phase input and single phase output).

## 1kVA to 3kVA

### HIGH POWER INTENSITY

- DSP technology
- Self monitoring and fault diagnosis
- Dual communication bus
- Low output voltage distortion

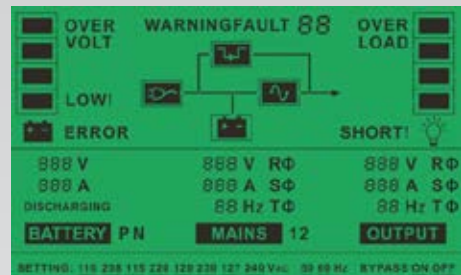
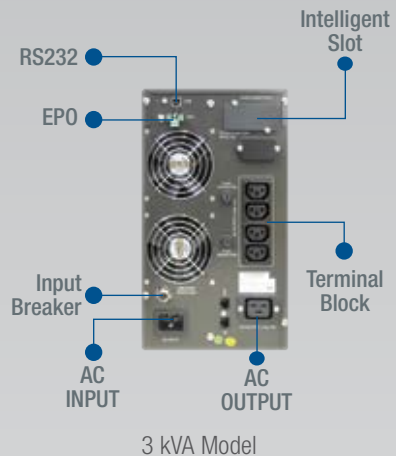
### STRONGEST PERFORMANCE

- Wide input voltage range
- 0.9 output power factor
- Input power factor correction and negligible current distortion

### FLEXIBILITY

- Selectable configuration via LCD: Online, Ecomode, Frequency/Voltage Converter mode (VCF)
- EPO connector for emergency power shutdown
- Standard external battery connector
- Easy installation

\* Some Medical and emergency devices have specific standard, so please check them before offer/install UPS



Display for ZP120N 1 kVA - 3kVA

- MENU:
- |                      |                     |
|----------------------|---------------------|
| 1. OPERATION MODE    | 5. INPUT MEASURES   |
| 2. MIMIC             | 6. BATTERY CAPACITY |
| 3. SETTINGS          | 7. OUTPUT MEASURES  |
| 4. STATUS/ALARM CODE |                     |

# 6kVA to 10kVA 1/1 - 3/1C



A multilanguage LCD allows to select the main functions of the UPS:

- MENU:
1. INPUT DATA
  2. OPERATING STATUS
  3. BATTERY INFORMATION
  4. LOAD INFORMATION
  5. OUTPUT INFO

## HIGHER PERFORMANCE

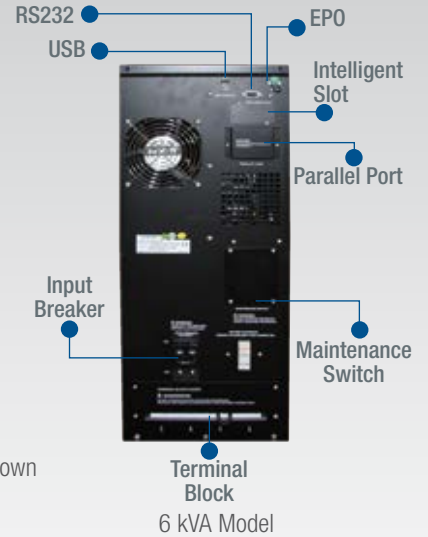
- DSP technology
- Multi-language LCD
- Log
- Dual communication bus
- Lower noise level

## HIGH POWER INTENSITY

- 0,9 Output power factor
- Minimum acceptable input voltage 110 Vac

## FLEXIBILITY

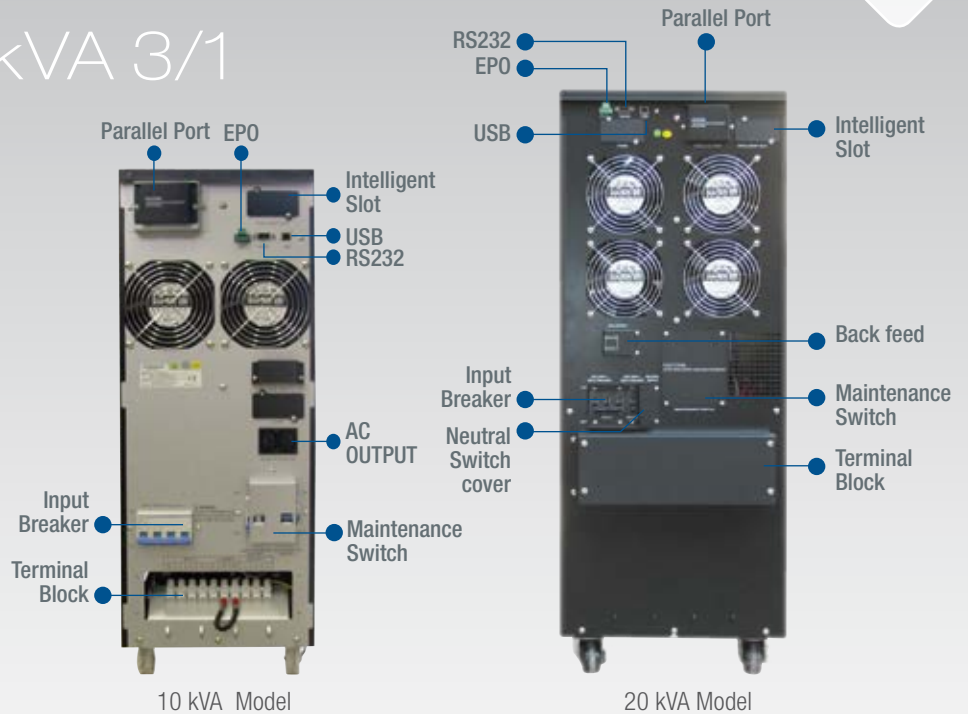
- Selectable configuration via LCD
- Up to 4 units may be installed in parallel
- Standard maintenance bypass
- Optional internal insulation transformer
- EPO connector for emergency power shutdown
- Standard external battery connector
- Back-feed protection



# 10kVA to 20kVA 3/1

The 10 - 20 kVA have the same technical performance of ZP120N 6 kVA and it presents the following advantages:

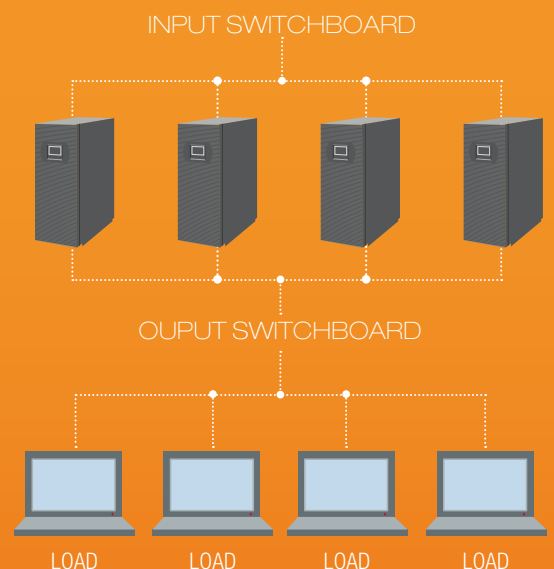
- Input voltage autosensing (3ph or 1ph)
- Large cabinet for better battery capacity
- Dual inputs with separate bypass line as standard



# Power Management

The Parallel Redundancy feature is a solution to expand your system. The parallel configuration shares the load equally to maximize UPS performance, while guaranteeing more efficient uninterrupted supply .

In parallel configuration 6kVA to 20kVA ZP120N UPS makes the system flexible to power expansion while redundancy improves uninterrupted operation.



# Interface Options

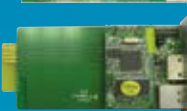
- Power flow display for UPS status monitoring
- Scheduled system shutdown/restart
- Scheduled UPS tests
- Warnings notification via Email/Pager
- Warnings notification via Broadcast
- Security password protection
- Remote Monitoring / Control via LAN
- Multi-language versions: English, German, French, Italian, Spanish, Portuguese and Chinese
- Selectable user interface
- UPS parameters setting
- Recorded log analysis
- The SNMP card allows UPS management across LAN using the main TCP/IP network communication protocols



**AS 400 RELAY CARD**



**MODBUS INTERFACE**



**SNMP CARD**

# Communication Solutions

Win Power CD comes together with UPS, which can also be downloaded from the Internet.

With this software is possible to:

- Remotely monitor and control the UPS
- Send alarm signals to the mobile phone
- Perform automatic shutdown of PC / server
- Schedule UPS self-test programs

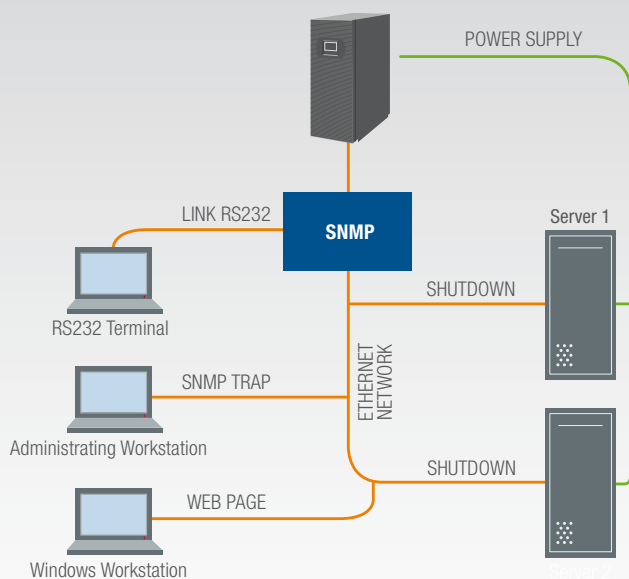
This software provides complete protection to your system during power failure.

It supports most of the operating systems including Windows, Linux, 7/8/9 Sun Solaris, FreeBSD, IBM AIX 4.3x, 5.1x, and HP-UX 11.x.

In addition to this, to increase the benefits to our customers, we have released a version for MAC downloadable from the Internet.



# Direct connection with Ethernet Network



ZP 120N

# Green Technology

ZP120N series guarantees high performance and a high efficiency with a low heat dissipation.

Extremely flexible to use, the ZP120N are designed with high power density and its standard configuration has already on board installed batteries ready for use.

Moreover ZP120N has battery terminal for connection of external battery cabinet for longer backup time.

They could be use in several modes like:

Online mode and ecomode frequency converter.

Efficiency over 96% in ecomode function.

Zero impact on the mains is guaranteed by the PFC input which ensures THDi <5%, PF ≥ 0.99.

Higher active power available given by 0,9 output power factor.

All the products compliant with the European directives about low voltage and electromagnetic compatibility.



# Technical Specifications

MODEL	ZP120N-1K	ZP120N-1K-KS*	ZP120N-2K	ZP120N-2K-KS*	ZP120N-3K	ZP120N-3K-KS*
Power Rating	1000VA/900W		2000VA/1800W		3000VA/2700W	
INPUT						
Rated Voltage	220Vac/230Vac/240Vac					
Voltage Tolerance	110Vac-300Vac					
Voltage Range - Line Low Transfer	176Vac/165Vac/110Vac (± 3%) based on load percentage 100%/75%/50%					
Voltage Range - Line High Transfer	300Vac (± 3%)					
Frequency Range	45-55Hz / 54-66Hz					
THDi %	<5% with full load					
Power Factor	≥0.99 (I/P:220V, FULL RCD LOAD)					
OUTPUT						
Rated Voltage	200VAC**/208VAC**/220VAC/230VAC/240VAC					
Voltage Regulation	± 2 %					
Rated Frequency AC Mode	50/60 Hz ± 0,2 %					
Crest Ratio	3:1					
Harmonic Distortion	< 3% THD, linear load					
Output Waveform	Pure Sinewave					
Overload Capability	105%-110%: 1 min; 110%-125%: 30 sec ; 125%-150%: 10 Sec; >150%: 1 sec					
Parallel	Up to 4					
Power Factor	0.9					
BATTERIES						
Type	Sealed lead acid battery, maintenance free					
Rating	12V/7Ah	According to capacity of external batteries	12V/7Ah	According to capacity of external batteries	12V/7Ah	According to capacity of external batteries
Number of batteries	3		8		8	
Back-up Time (typical load)***	>10 minutes		>18 minutes		>10 minutes	
DC Voltage	36Vdc		96Vdc		96Vdc	
Charging Time	< 5 hours					
GENERAL CHARACTERISTICS						
Transfer Time (Inverter to bypass)	0 ms					
Efficiency (online mode)	92%		92%		92%	
Dimensions WxHxD (mm)	145x220x400		192x347x460		192x347x460	
Net Weight (kg)	13	7	31	13	31	13
Operating Temperature	0°C ~ 40 °C					
Noise Level (at 1m)	< 50dB			< 55dB		
Humidity Tolerance	0-95% (no condensing)					
Interface standard via Smart USB	WinPower Software supports: Windows 95/98/NT/2000/XP/ME, Linux, Sun Solaris, IBM Aix, FreeBSD, HP-UX, and MAC					
Interface for Intelligent Slot	SNMP / RS485 / AS400 Card/ ModBus					
Compliance	<ul style="list-style-type: none"> <li>• European Directives: L V 2006/95/CE Low voltage directive; EMC 2004/108/EC Electromagnetic compatibility directive</li> <li>• Standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2 C2</li> <li>• Classification according to IEC 62040-3 (Voltage Frequency Independent) VFI - SS - 111</li> </ul>					

\* ks versions are supplied with extra battery charger

\*\* Derate to 90% with 208Vac output voltage.

\*\*\* The autonomy time are calculated at 75% rated load as PF=0.9.

Note: product specifications are subject to change without further notice



# Technical Specifications

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MODEL	ZP120N-6K	ZP120N-6K-KS*	ZP120N-10K-11	ZP120N-10K-11-KS*
Power Rating	6000VA/5400W		10000VA/9000W	
INPUT				
Rated Voltage	220Vac/230Vac/240Vac			
Voltage Tolerance	110Vac-276Vac			
Voltage Range - Line Low Transfer	176Vac/110Vac (± 3%) based on load percentage 100%/50%			
Voltage Range - Line High Transfer	276Vac (± 3%)			
Frequency Range	45-55Hz / 54-66Hz			
THDi %	<5% with full load			
Power Factor	≥0.99 (I/P:220V, FULL RCD LOAD)			
OUTPUT				
Rated Voltage	200VAC**/208VAC**/220VAC/230VAC/240VAC			
Voltage Regulation	± 1 %			
Rated Frequency AC Mode	50/60 Hz ± 0,2 %			
Crest Ratio	3:1			
Harmonic Distortion	< 2% THD, linear load			
Output Waveform	Pure Sinewave			
Overload Capability	100%-110%: 5 min ; 110%-130%: 1 min ; 130%-150%: 10 sec ; >150%: 2 sec			
Parallel	Up to 4			
Power Factor	0.9			
BATTERIES				
Type	Sealed lead acid battery, maintenance free			
Rating	12V/7Ah	According to capacity of external batteries	12V/9Ah	According to capacity of external batteries
Number of batteries	20		20	
Back-up Time (typical load)***	> 10 minutes		>10 minutes	
DC Voltage	240Vdc			
Charging Time	< 5 hours			
GENERAL CHARACTERISTICS				
Transfer Time (Inverter to bypass)	0 ms			
Efficiency (online mode)	>92%			
Dimensions WxHxD (mm)	260x560x708			
Net Weight (kg)	86	34	92	37
Operating Temperature	0°C ~ 45 °C			
Noise Level (at 1m)	<50dB		<55dB	
Humidity tolerance	0-95% (no condensing)			
Interface standard via Smart USB	WinPower Software supports: Windows 95/98/NT/2000/XP/ME, Linux, Sun Solaris, IBM Aix, FreeBSD, HP-UX, and MAC			
Interface for Intelligent Slot	SNMP / RS485 / AS400 Card/ ModBus			
Compliance	<ul style="list-style-type: none"> <li>• European Directives: L V 2006/95/CE Low voltage directive; EMC 2004/108/EC Electromagnetic compatibility directive</li> <li>• Standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2 C3</li> <li>• Classification according to IEC 62040-3 (Voltage Frequency Independent) VFI - SS - 111</li> </ul>			

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# Technical Specifications

MODEL		ZP120N-10K-31C	ZP120N-10K-31C-KS*	ZP120N-10K-31	ZP120N-10K-31-KS*	ZP120N-20K-31	ZP120N-20K-31-KS*
Power Rating		10000VA/9000W				20000VA/18000W	
INPUT							
Rated Voltage		220VAC/230VAC/240VAC 1ph or 380/400/415 3ph (autosensing)				220VAC/230VAC/240VAC 1ph or 380/400/415 3ph (autosensing)	
1 phase	Voltage Tolerance	110Vac-176Vac(*) -276Vac (±1%) Phase				110Vac-276Vac	
	Voltage Range - Line Low Transfer					176Vac/110Vac (± 3%) based on load percentage 100%/50%	
	Voltage Range - Line High Transfer					276Vac (± 3%)	
3 phase	Voltage Tolerance	190Vac-304Vac(**) -478Vac (±1%) 3 Phase				190Vac-478Vac	
	Voltage Range - Line Low Transfer					305Vac/190Vac (± 3%) based on load percentage 100%/50%	
	Voltage Range - Line High Transfer					478Vac (± 3%)	
Frequency Range		45-55Hz / 54-66Hz					
THDi %		<5% with full load					
Power Factor		≥0.99 (FULL LOAD)					
OUTPUT							
Rated Voltage		200VAC**/208VAC**/220VAC/230VAC/240VAC					
Voltage Regulation		± 1 %					
Rated Frequency AC Mode		50/60 Hz ± 0,2 %					
Crest Ratio		3:1					
Harmonic Distortion		< 2% THD, linear load					
Output Waveform		Pure Sinewave					
Overload Capability		100%-110%: 5 min; 110%-130%: 1 min; 130%-150%: 10 sec; >150%: 2 sec					
Power Factor		0.9					
Parallel		Up to 4					
BATTERIES							
Type		Sealed lead acid battery, maintenance free					
Rating		12V/9Ah	According to capacity of external batteries	12V/7Ah	According to capacity of external batteries	12V/7Ah	According to capacity of external batteries
Numbers of batteries		20		24+24 optional		24+24 optional	
Back-up Time (typical load)***		> 10 minutes		> 6 minutes + 6 minutes optional		> 6 minutes + 6 minutes optional	
DC Voltage		240Vdc		288Vdc		288Vdc	
Charging Time		< 5 hours					
GENERAL CHARACTERISTICS							
Transfer Time (Inverter to bypass)		0 ms					
Efficiency (online mode)		>92%		>93%		>92%	
Dimensions WxHxD (mm)		260x708x560				350x890x650	
Net Weight (kg)		93	38	175	160	53	
Operating Temperature		0°C ~ 45 °C					
Noise Level (at 1m)		<55dB		<55dB	<55dB	<55dB	
Humidity Tolerance		0-95% (no condensing)					
Interface standard via Smart USB		WinPower Software supports: Windows 95/98/NT/2000/XP/ME, Linux, Sun Solaris, IBM Aix, FreeBSD, HP-UX, and MAC					
Interface for Intelligent Slot		SNMP / RS485 / AS400 Card/ ModBus					
Compliance		<ul style="list-style-type: none"> <li>• European Directives: L V 2006/95/CE Low voltage directive; EMC 2004/108/EC Electromagnetic compatibility directive</li> <li>• Standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2 C3</li> <li>• Classification according to IEC 62040-3 (Voltage Frequency Independent) VFI - SS - 111</li> </ul>					

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# G-Tec Service

**G-TEC Service, our technical assistance facility, employs highly trained engineers able to provide a reliable sales assistance service.**

A dedicated **CALL CENTRE** for connection to the G-TEC Service organisation. G-TEC Service personnel are always on hand and happy to provide advice and assistance regarding the installation, maintenance, fault finding and repair of UPS equipment. G-TEC Service can provide assistance during commissioning and start-up of the UPS equipment on-site with additional training of site personnel during handover.

**MAINTENANCE CONTRACTS** can be provided by G-TEC Service Partners to minimise response times and reduce the cost of

repairs. Contracts range from periodic inspections to comprehensive cover including labour and materials.

**FAST & READY:** fast repair on site is guaranteed thanks to the use of state-of-the-art UPS technology and the professionalism of the G-TEC Service personnel and Authorised Assistance Centres. G-TEC Service guarantees that failed parts are replaced with original ones and are tested and updated in order to maintain the safety, reliability and operating characteristics of the UPS system.



[www.gtec-power.eu](http://www.gtec-power.eu)



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