SAPOTEC
ZP-Series

1 to 20 kVA

Sapotec is proud to introduce the upgraded superior **ZP** 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. **ZP UPS** power capacity is available **from 1kVA to 3kVA 1/1** (1/1 stands for single phase input and single phase output); **from 6kVA to 10kVA 1/1** and **from 10kVA to 20kVA 3/1** (3/1 stands for three phase input and single phase output).

COMMON FEATURES:

- Strongest performance
- High Power Density
- Flexible Settings
- Internal components designed for stressing environment
- Highest efficiency with low heating dissipation
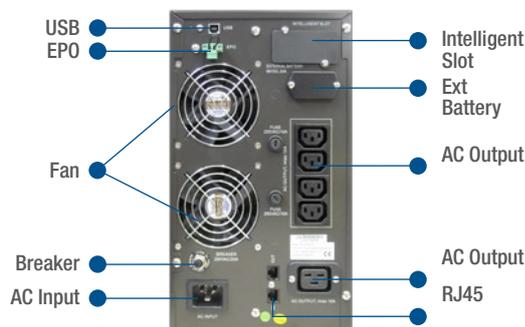- Long run time Model without internal batteries and dedicated super charger

1-3kVA 1/1   6-10kVA 1/1   10-20kVA 1/1-3/1

1kVA to 3kVA 1/1

STRONGEST PERFORMANCE
- DSP technology fully controlled
- Self monitoring and fault diagnosis
- Dual internal communications bus
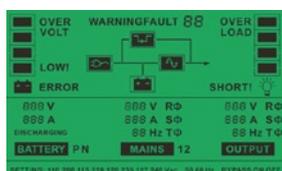- Lowest output voltage distortion

USB
EPO
Fan
Breaker
AC Input

Intelligent Slot
Ext Battery
AC Output
AC Output
RJ45

HIGH POWER DENSITY
- Wide input voltage range
- 0,8 output power factor
- Input power factor correction and lowest current distortion

FLEXIBLE SETTINGS
- Selectable configuration via LCD: online, ecomode, frequency/voltage converter mode (CVCF)
- EPO connector for remote emergency power off
- Standard external battery connector
- Simplified installation

MENÚ:
- OPERATION MODE
- MIMIC
- SETTINGS
- STATUS/ALARM CODE
- INPUT MEASURES
- BATTERY CAPACITY
- OUTPUT MEASURES

STRONGEST PERFORMANCE

- DSP technology fully controlled
- LCD display multi language
- Real time event logs
- Dual internal communications bus
- Reduced audible noise

HIGH POWER DENSITY

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

FLEXIBLE SETTINGS

- Selectable configuration via LCD: online, parallel, ecomode and CVCF
- Parallelable up to 4 units
- Standard mechanical maintenance bypass
- Optional internal insulation transformer
- EPO connector for remote emergency power off
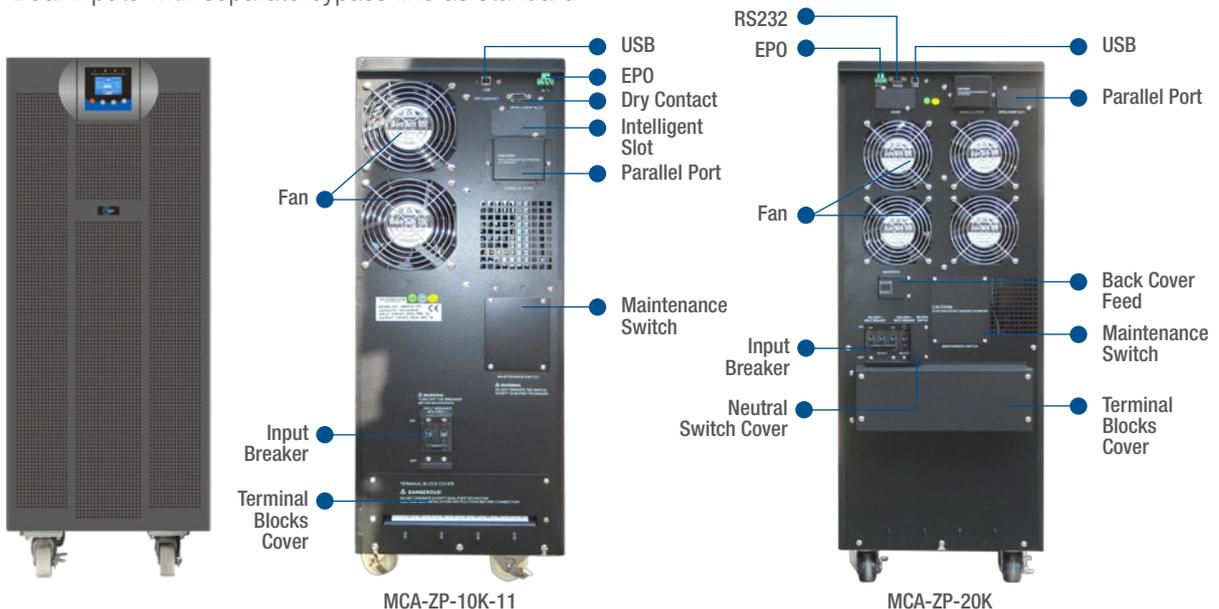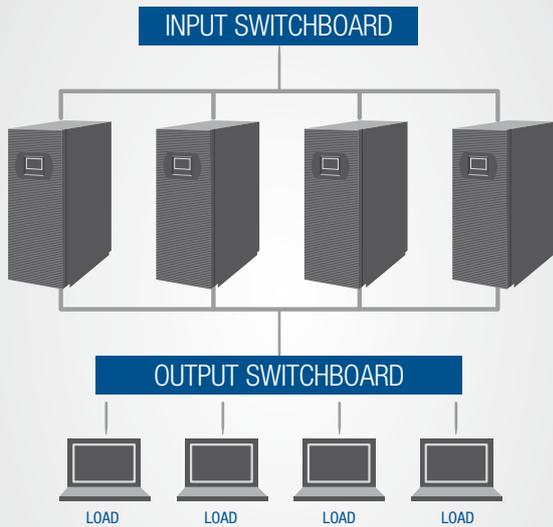- Standard external battery connector
- Back-feed protection

USB

EPO
Dry Contact
Intelligent Slot
Parallel Port

Fan

NORMAL | BATTERY | BYPASS | FAULT

Input
220 V
60 Hz
100%

200.0V

Output
220 V
60 Hz
10000 W

MENÚ:

- **INPUT INFORMATION**
- **OPERATING STATUS**
- **BATTERY INFORMATION**
- **LOAD INFORMATION**
- **OUTPUT INFORMATION**

The 10-20kVA threephase input and single phase output is an upgrade of the MCA-ZP-10K-11. They have the same technical performance with the following advantages:

- Input voltage autosensing (3ph or 1ph)
- Large cabinet suitable for more internal battery strings
- Dual inputs with separate bypass line as standard

USB
EPO
Dry Contact
Intelligent Slot
Parallel Port

Fan

Maintenance Switch

Input Breaker

Terminal Blocks Cover

RS232
EPO

USB

Parallel Port

Fan

Input Breaker

Neutral Switch Cover

Back Cover Feed

Maintenance Switch

Terminal Blocks Cover

MCA-ZP-10K-11

MCA-ZP-20K

INPUT SWITCHBOARD

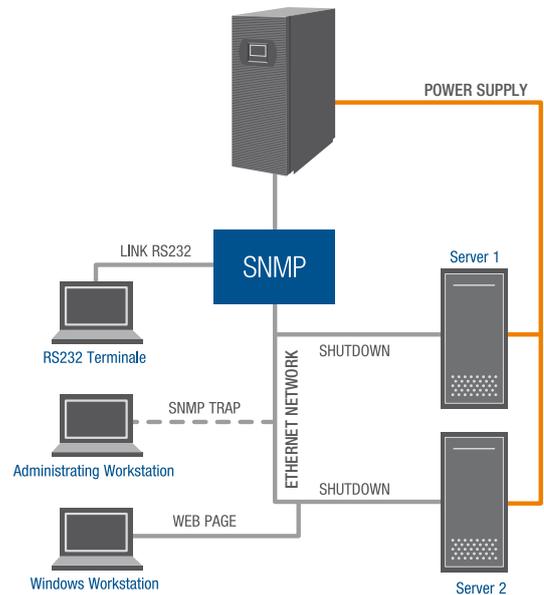OUTPUT SWITCHBOARD

LOAD LOAD LOAD LOAD

MCA-ZP 6kVA to 20kVA UPS in parallel configuration to meet most demanding power requirement. Increase power availability and flexibility.
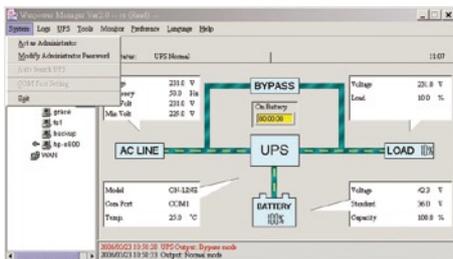
Parallel Redundancy feature provides economic power solution for system integration. Furthermore, parallel redundancy feature equally shares the load to maximize UPS performance, and more secure UPS continuous operation.

Direct Connection with Ethernet Network

POWER SUPPLY

LINK RS232 SNMP Server 1

RS232 Terminale

SHUTDOWN

ETHERNET NETWORK

SNMP TRAP

Administrating Workstation

SHUTDOWN

WEB PAGE

Windows Workstation

Server 2

Communication and Power Management Solutions

WinPower CD is packed with UPS, and can also be downloaded from the internet. It has the function to remote monitor and control UPS, 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, 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.

INTERFACE OPTION:

SNMP CARD   RELAY CARD/AS400   MODBUS INTERFACE

- 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
- 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 Specification						
Model	ZP-1K	ZP-1K-KS*	ZP-2K	ZP-2K-KS*	ZP-3K	ZP-3K-KS*
Power Rating	1000VA/800W		2000VA/1600W		3000VA/2400W	
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					
Power factor	0,8					
BATTERIES						
Type	Sealed lead acid battery, maintenance free					
Rating	12V/7Ah	Depend on the capacity of external batteries	12V/7Ah	Depend on the capacity of external batteries	12V/7Ah	Depend on the capacity of external batteries
Numbers 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)	88%		88%		88%	
Dimensions WxHxD (mm)	145x220x400		192x347x460		192x347x460	
Net Weight (kg)	13	7	31	13	31	13
Operating Temperature	0°C ~ 45 °C					
Noise Level (@ 1m)	50dB					
Humidity	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	IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 62040-1-1, IEC 62040-2, IEC 60950-1					

* KS version are provided with battery extra charger
** Derate to 90% with 208Vac output voltage. Derate to 80% with 200Vac output voltage
Note: product specifications are subject to change without further notice.

Technical Specification				
Model	ZP-6K	ZP-6K-KS*	ZP-10K-11	ZP -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	208VAC**/220VAC/230VAC/240VAC			
Voltage regulation	± 1 %			
Rated Frequency AC Mode	50/60 Hz ± 0,2 %			
Crest Ratio	3:1			
Harmonic distortion	< 0,2% 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			
BATTERY				
Type	Sealed lead acid battery, maintenance free			
Rating	12V/7Ah	Depend on the capacity of exter-nal batteries	12V/9Ah	Depend on the capacity of exter-nal batteries
Numbers 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%		>94%	
Dimensions WxHxD (mm)	260x708x560		260x708x560	
Net Weight (kg)	86	34	92	37
Operating Temperature	0°C ~ 40 °C			
Noise Level (@ 1m)	< 50dB			
Humidity	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/ USB / ModBus			
Compliance	IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 62040-1-1, IEC 62040-2, IEC 60950-1, ETS 300019-2-2			

* KS version are provided with battery extra charger
** Derate to 90% with 208Vac output voltage.
Note: product specifications are subject to change without without further notice.

Technical Specification				
Model	MCA-ZP-10K-31	MCA-ZP-10K-31-KS*	MCA-ZP-20K-31	MCA-ZP-20K-31-KS*
Power Rating	10000VA/9000W		20000VA/18000W	
INPUT				
Rated voltage	220VAC/230VAC/240VAC 1ph or 380/400/415 3ph (autosensing)			
1 phase — Voltage Tolerance	110VAC-276VAC			
1 phase — Voltage range - Line Low Transfer	176Vac/110Vac (± 3%) based on load percentage 100%/50%			
1 phase — Voltage range - Line High Transfer	276Vac (± 3%)			
3 phase — Voltage Tolerance	190VAC-478VAC			
3 phase — Voltage range - Line Low Transfer	305Vac/190Vac (± 3%) based on load percentage 100%/50%			
3 phase — 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	208VAC**/220VAC/230VAC/240VAC			
Voltage regulation	± 1 %			
Rated Frequency AC Mode	50/60 Hz ± 0,2 %			
Crest Ratio	3:1			
Harmonic distortion	< 0,2% 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			
BATTERY				
Type	Sealed lead acid battery, maintenance free			
Rating	12V/7Ah	Depend on the capacity of external batteries	12V/7Ah	Depend on the capacity of external batteries
Numbers of batteries	24 + 24(optional)		24 + 24	
Back-up Time (typical load)	> 6 minutes + 6 minutes(optional)		> 6 minutes	
DC Voltage	288Vdc			
Charging time	< 5 hours			
GENERAL CHARACTERISTICS				
Transfer Time (Inverter to bypass)	0 ms			
Efficiency (online mode)	>93%		>93%	
Dimensions WxHxD (mm)	350x890x650		350x890x650	
Net Weight (kg)	175		183	
Operating Temperature	0°C ~ 45 °C			
Noise Level (@ 1m)	55dB			
Humidity	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/ USB / ModBus			
Compliance	IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 62040-1-1, IEC 62040-2, IEC 60950-1			

* KS version are provided with battery extra charger
** Derate to 90% with 208Vac output voltage.
Note: product specifications are subject to change without without further notice.

*Intelligent **power protection.***
For power to flow, for voltage to remain and for energy to be produced.

INDIVIDUAL SOLUTIONS FOR
QUALITY-CONSCIOUS CUSTOMERS

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