



## ZY 120 Online UPS

1-20 kVA singlephase/singlephase  
10-20 kVA threephase/singlephase



- + SERVERS
- + INTERNET CENTERS/LAN
- + INDUSTRIAL APPLICATION
- + EMERGENCY DEVICES



# Product Overview



- + RELIABLE**
- + USER FRIENDLY**
- + FLEXIBLE**
- + EASY TO INSTALL**



## MAIN CHARACTERISTICS

ZY120 series is designed to guarantee the safety supply of critical loads. High input and output power factor ensure high performances, and parallel configuration guarantees higher flexibility.

Coated PCBs allow the use of these UPS in several application and environments. The smart battery management and the fun auto speed management allow a complete protection both of the battery and the equipment.



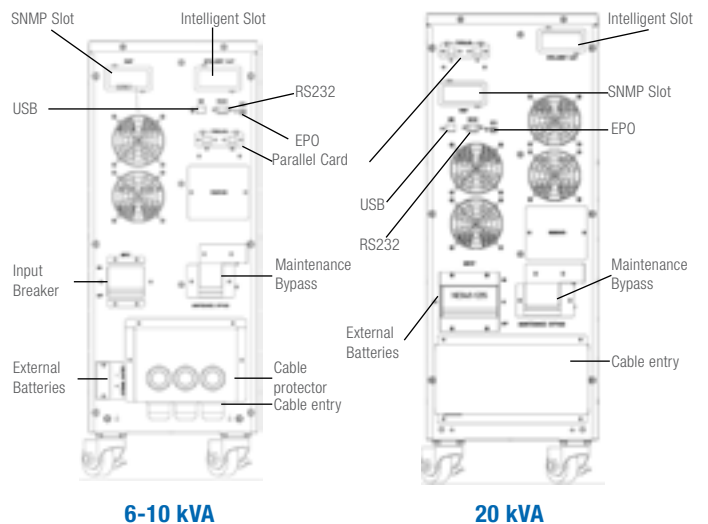
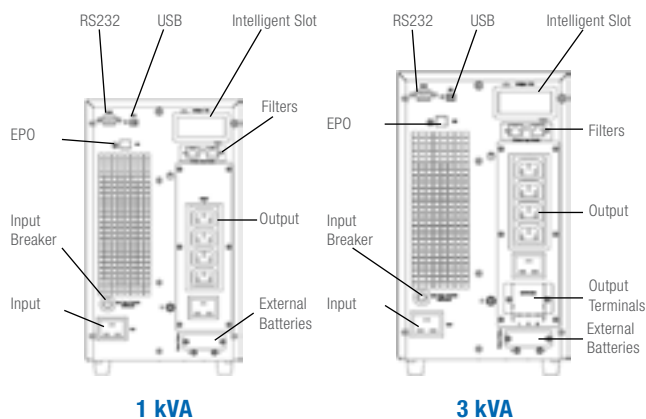
## COMMUNICATION SKILLS



Software supports 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.



## UPS BACK SIDE CONFIGURATION



# Technical Specifications

MODEL	ZY120-1K	ZY120-1K-KS	ZY120-2K	ZY120-2K-KS	ZY120-3K	ZY120-3K-KS
<b>Power Rating</b>	1kVA/ 900W		2kVA/ 1800W		3kVA/ 2700W	
<b>INPUT</b>						
<b>Cold start</b>	YES, default frequency=50Hz or settable					
<b>Acceptable Input Voltage</b>	110VAC~288VAC					
<b>Phase</b>	Single phase in, single phase out					
<b>Input Current (@ nominal input voltage)</b>	4.8 A		9,6 A		14,4 A	
<b>Input power factor</b>	≥0.97					
<b>Input Frequency Range</b>	40~70Hz					
<b>OUTPUT</b>						
<b>Frequency adaptable</b>	Settable					
<b>Power factor</b>	0,9					
<b>Output Voltage</b>						
- Waveform (Bat. Mode)	Pure Sine Wave					
- Nominal Voltage	200/208/220/230/240VAC					
- Voltage regulation	±1 %					
- Voltage distortion	≤2% THD, linear load ≤ 5.5% THD, non-linear load		≤2% THD, linear load ≤ 5% THD, non-linear load			
<b>Output Frequency</b>	±5Hz default					
<b>Transfer Time</b>						
- Line mode to battery mode	0					
- Inverter to bypass	2 ms					
<b>Efficiency</b>	90,0 %		90,0 %		91,0%	
<b>Noise</b>	<43dB@<90%load,<47dB@>90%load		<45dB@<60%load,<50dB@>60%load			
<b>Overload Capability (Inverter)</b>	105%~130%: Transfer to bypass after 1 mins. 150%: Transfer to bypass after 30s					
<b>Crest Ratio</b>	3:1					
<b>BATTERY</b>						
<b>Rating/Type</b>	12VDC/7Ah	Depend on the capacity of external batteries	12VDC/7Ah	Depend on the capacity of external batteries	12VDC/7Ah	Depend on the capacity of external batteries
<b>Quantity</b>	3		6		8	
<b>DC Voltage</b>	36VDC		72VDC		96VDC	
<b>Back-up Time</b>	6mins @80% load	Depend on the capacity of external batteries	6mins @80% load	Depend on the capacity of external batteries	5.5mins @80% load	Depend on the capacity of external batteries
<b>Charger</b>						
- Charging voltage	float:41VDC/boost:42VDC		float:82VDC/boost:84VDC		float:109VDC/boost:112VDC	
- Charging current (max)	1A	8A	1A	8A	1A	8A
- Charging time	8h recharge to 90%	Depend on the capacity of external batteries	8h recharge to 90%	Depend on the capacity of external batteries	8h recharge to 90%	Depend on the capacity of external batteries
<b>INDICATOR &amp; ALARM</b>						
<b>Display</b>	LED+LCD					
<b>Alarm</b>	two short one long					
<b>Fault</b>	Continuous beeping					
<b>INTERFACE</b>						
<b>SNMP(option)</b>	Power Management from SNMP Manager and Web Browser					
<b>Intelligent Kits</b>	Dry contact					
<b>USB</b>	B-type USB port					
<b>EPO</b>	Remoted EPO function for customer. Short to activate					
<b>MECHANICAL</b>						
<b>WXDXH (mm)</b>	144*364*228		190*387*336		190*439*336	
<b>Net Weight (kg)</b>	12	6	21	10,5	25,6	11,5
<b>STANDARDS</b>						
<b>Safety</b>	IEC/EN 62040-1-1					
<b>EMC</b>	IEC/EN 62040-2 Category C3					

Note: Products specifications are subject to change without further notice

# Technical Specifications

MODEL	ZY120-6K	ZY120-6K-KS	ZY120-10K-11	ZY120-10K-11-KS	ZY120-20K-11-KS	ZY120-10K-31	ZY120-10K-31-KS	ZY120-20K-31-KS
<b>Power Rating</b>	6 kVA/ 5400W		10 kVA/ 9000W		20 kVA/ 18000W	10 kVA/ 9000W		20 kVA/ 18000W
<b>INPUT</b>								
<b>Cold start</b>	YES, default frequency=50Hz or settable							
<b>Acceptable Input Voltage</b>	50%~125%(220VAC/230VAC/240VAC)					50%~125%(380VAC/400VAC/415VAC)		
<b>Phase</b>	Single phase in, single phase out					Three phase in, single phase out		
<b>Input power factor</b>	≥0.99				≥0.98	≥0.95		
<b>Input Frequency Range</b>	40~70Hz							
<b>OUTPUT</b>								
<b>Frequency adaptable</b>	Settable							
<b>Power factor</b>	0,9							
<b>Output Voltage</b>								
- Waveform (Bat. Mode)	Pure Sine Wave							
- Nominal Voltage	220/230/240VAC							
- Voltage regulation	±1 %							
- Voltage distortion	≤1% THD, linear load ≤ 5% THD, non-linear load							
<b>Output Frequency</b>	settable, ± 3Hz default							
<b>Transfer Time</b>								
- Line mode to battery mode	0							
- Inverter to bypass	4 ms				0			
<b>Efficiency</b>	93,0 %				93,5%	92,0%		93,5%
<b>Noise</b>	<58dB					<60dB		
<b>Overload Capability (Inverter)</b>	110%: Transfer to bypass after 10 mins 130%: Transfer to bypass after 1 min 150%: Transfer to bypass after 30s, shutdown after 1 min (Line mode)							
<b>Crest Ratio</b>	3:1							
<b>BATTERY</b>								
<b>Rating/Type</b>	12VDC/7Ah	Depend on the capacity of external batteries	12VDC/9Ah	Depend on the capacity of external batteries	Depend on the capacity of external batteries	12VDC/9Ah	Depend on the capacity of external batteries	Depend on the capacity of external batteries
<b>Quantity</b>	16		16			16		
<b>DC Voltage</b>	192VDC	192/240VDC	192VDC	192/240VDC(Opt)	192/240VDC(Opt)	192VDC	192/240VDC(Opt)	192/240VDC(Opt)
<b>Back-up Time</b>	4mins @80% load	Depend on the capacity of external batteries	3,5 mins @80% load	Depend on the capacity of external batteries	Depend on the capacity of external batteries	3 mins @80% load	Depend on the capacity of external batteries	Depend on the capacity of external batteries
<b>Charger</b>								
- Charging voltage	(220±1%)VDC		(220±1%)VDC		(220±1%)VDC		(220±1%)VDC	
- Charging current (max)	1A	5A	1A	5A	5A	1A	5A	5A
- Charging time	7h recharge to 90%	Depend on the capacity of external batteries	8h recharge to 90%	Depend on the capacity of external batteries	Depend on the capacity of external batteries	8h recharge to 90%	Depend on the capacity of external batteries	Depend on the capacity of external batteries
<b>INDICATOR &amp; ALARM</b>								
Display	LED+LCD							
Alarm	Sounding once per second							
<b>INTERFACE</b>								
RS232	Standard Cable support Monitor Software							
Intelligent Kits	Dry contact							
SNMP(option)	Power Management from SNMP Manager and Web Browser							
EPO	Remoted EPO function for customer. Short to activate							
<b>MECHANICAL</b>								
<b>WXDXH (mm)</b>	250*562*650	250*504*480	250*562*650	250*504*480	250*562*770	250*562*770	250*562*650	250*562*710
<b>Net Weight (kg)</b>	57	18	65	20	33	75	25	33
<b>STANDARDS</b>								
Safety	IEC/EN 62040-1-1							
EMC	IEC/EN 62040-2 Category C3							

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