

# POWERPACK SE SERIES

## 6-10 kVA

1:1  
PHASE

### ONLINE UPS



HOME/OFFICE



EMERGENCY



MEDICAL



INDUSTRY



DATA CENTER



TRANSPORT



UPS ONLINE



TOWER



POWER FACTOR



SERVICE



## FEATURES

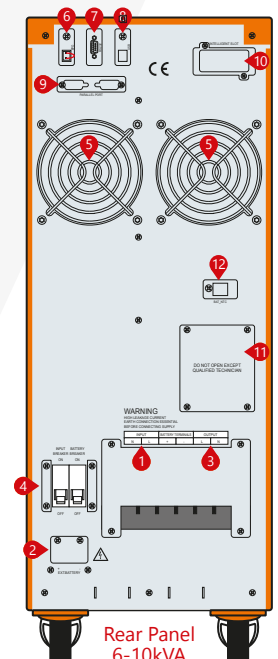
- High Frequency and True Double-Conversion
- DSP (Digital Signal Processors) Technology
- Input Power Factor Correction (PFC)
- Wide Input Voltage Range (110~300V)
- Output Power Factor 0.9
- Cold Start
- Auto Sensing Frequency
- ECO Mode Operation for Energy Saving
- Selectable Output Voltage via LCD
- 50Hz/60Hz Frequency Converter Mode Available
- Selectable Battery Low Voltage via LCD
- Power-On Self Test
- Advanced Battery Management (ABM)
- Short Circuit and Overload Protection
- Automatically Charging Battery at UPS Off Mode
- Fan Speed Auto Control when Load Varies
- Standard RS232 Communication Port
- USB/SNMP Communication Port (Optional)
- Emergency Power Off (EPO) (Optional)
- Extension Battery Bank (Optional)
- Manual Bypass
- N+X Redundancy Parallel (Optional)

## CERTIFICATES



## DETAILS

1. AC Input
2. DC Input
3. Outlet
4. Breaker
5. Fan
6. EPO
7. RS232
8. USB (Optional)
9. Parallel Card (Optional)
10. SNMP/AS400 (Optional)
11. Manual Bypass
12. BAT\_NTC (Optional)



Rear Panel  
6-10kVA

enjoy our power  
get more energy

**MAKELSAN®**  
Uninterruptible Power Supplies

MODEL		
Power Watt	<b>6 kVA / 5400 W</b>	<b>10 kVA / 9000 W</b>
<b>INPUT</b>		
Related Voltage	208V / 220V / 230V / 240 VAC	
Voltage Range	Half Load (110-300) ±5 VAC, Full Load (160-300) ±5 VAC	
Frequency	40 ~ 70 Hz (Auto-Sense)	
Power Factor	≥0.99	
Bypass Voltage Range	160V - Rated Output Voltage +32V	
<b>OUTPUT</b>		
Voltage Range	208V / 220V / 230V / 240 VAC (Setting Available via LCD)	
Voltage Regulation	±1%	
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (Synchronized Range); 50 / 60 Hz ±0.1 Hz (Battery Mode)	
Waveform	Pure Sine Wave	
Crest Factor	3:1	
Harmonic Distortion	≤2% (Linear Load); ≤5% (Non-Linear Load)	
Transfer Time	AC Mode to Battery Mode: 0ms Inverter Mode to Bypass Mode: 0ms	
Overload Capability	105% ~ 125%: Transfer to Bypass after 3min 125% ~ 150%: Transfer to Bypass after 30sec >150%: Transfer to Bypass after 100ms	
<b>EFFICIENCY</b>		
AC Mode	≥92%	
ECO Mode	≥98%	
<b>BATTERIES</b>		
DC Voltage	192V-240V	
Inbuilt Battery	16-20 x 7-9Ah	
Charge Current	Standard Model	1A
	Long Time Model	1A / 3.5A / 7A
Typical Recharge Time	8 hours Recover to 90% Capacity	
<b>ALARMS</b>		
Utility Failure	Beep / 4sec	
Low Battery	Beep / 1sec	
Overload	Beep Twice / 1sec	
UPS Fault	Long Beep	
<b>ENVIRONMENT</b>		
Humidity	20-90% RH @ 0-40°C (Non-Condensing)	
Noise Level	≤50 dB (1m)	
<b>MANAGEMENT</b>		
RS232 (Standard)/USB(Optional)	Supports Windows®98/2000/2003/XP/Vista/2008/Windows®7/8/10	
SNMP (optional)	Power Management from SNMP Manager and Web Browser	
<b>DIMENSIONS &amp; WEIGHT</b>		
Dimension WxDxH (mm)	262 x 650 x 735	
Packaging Dimension WxDxH (mm)	440 x 720 x 940	
Net Weight (kg)	64.1	70.8
Gross Weight (kg)	72.2	78.9

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