

MicroMate®

Uninterruptible Power Supply Systems



HW Series

High-Performance Integrated
Outdoor Online UPS



Outdoor
Environment



Industry



Emergency
Devices



Telecom



Local area
Networks

1 ~ 10KVA (1 Ph in / 1 Ph Out)

Product snapshot:

Model: 1-10KVA
Nominal voltage: 220/230/240VAC
Nominal frequency: 50/60Hz
Output power factor: 0.9

Reliable power Rich experience

HW series communication marginal network outdoor UPS is special for wireless communication system of outdoor micro cellular base station and design of a high-performance integrated outdoor online uninterrupted power supply system, has the very high technology advancement and practicability.

Key Features

- HW Series Outdoor Intelligent High Frequency Online UPS provide continuous pure sine wave AC power supply for outside communications / network equipment.
- Double-conversion online design, high temperature resistant, anti-cold, sealing level for IP55; With the wide range of input voltage and frequency of input window (-45% +35% rated voltage and ± 10% rated frequency), in many remote areas after a severe test of the grid.

Application

This UPS is commonly used in the corner of the city, remote roads, mountains, bad environment, such as high temperature (+50 °C) / low temperature (-40 °C), severe dust, moisture, rain, mist erosion, very poor power quality (voltage long-term higher than 260V or less than 160V, frequency abnormal change) in the area.

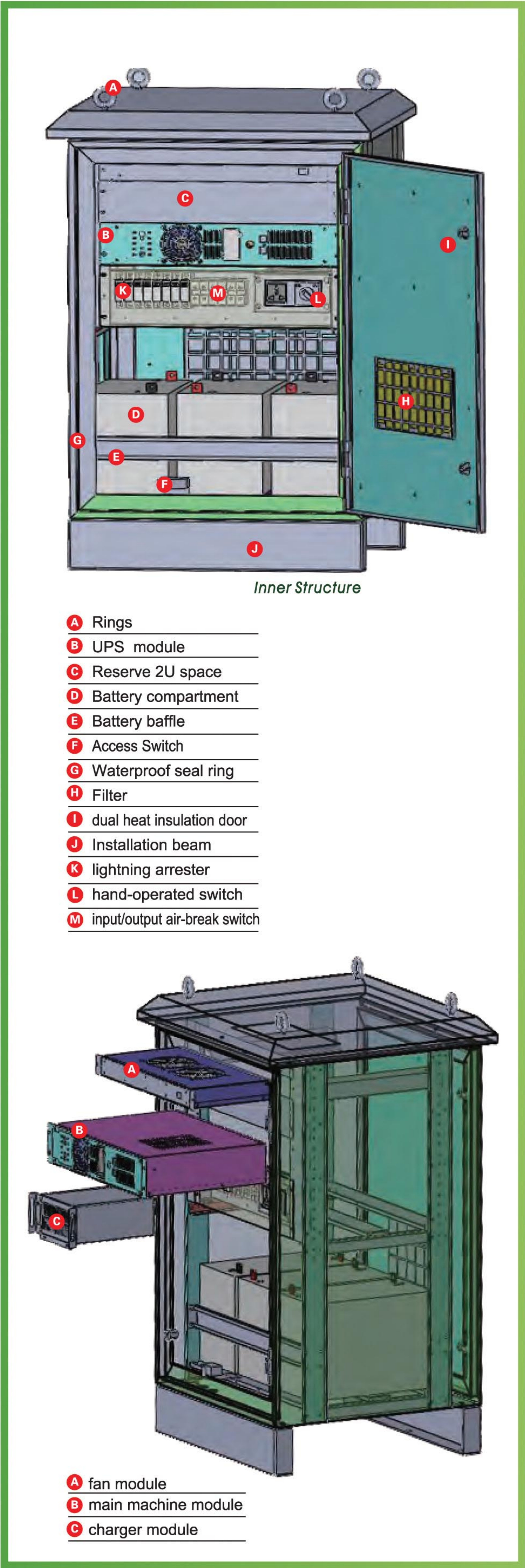
High Reliability of the UPS System

- Using microprocessor control, directly produce high-frequency pulse width modulation wave (SPWM) control of the UPS inverter, to simplify the UPS control circuit, to improve the stability, to have more real-time UPS to quickly respond to changes in the external environment and guarantee the machine's control circuit is more simple and reliable.
- Using digital control techniques, to avoid the traditional analog control temperature drift inherent defects such as hardware parameters, to ensure consistency and reliability of UPS.

Fine dust-proof, water-proof features

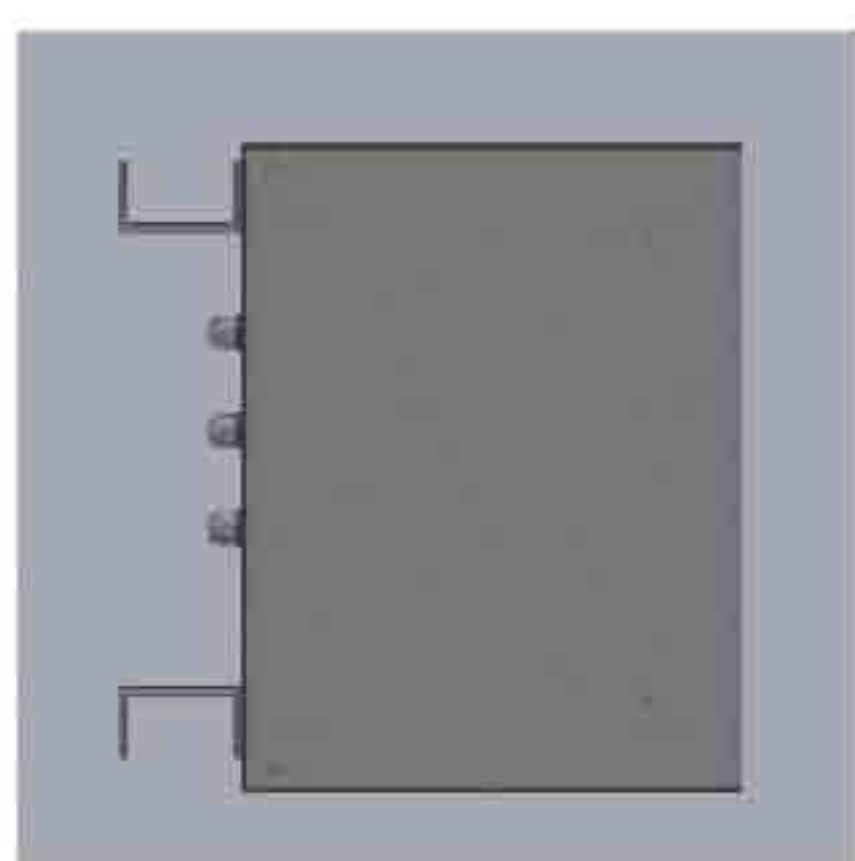
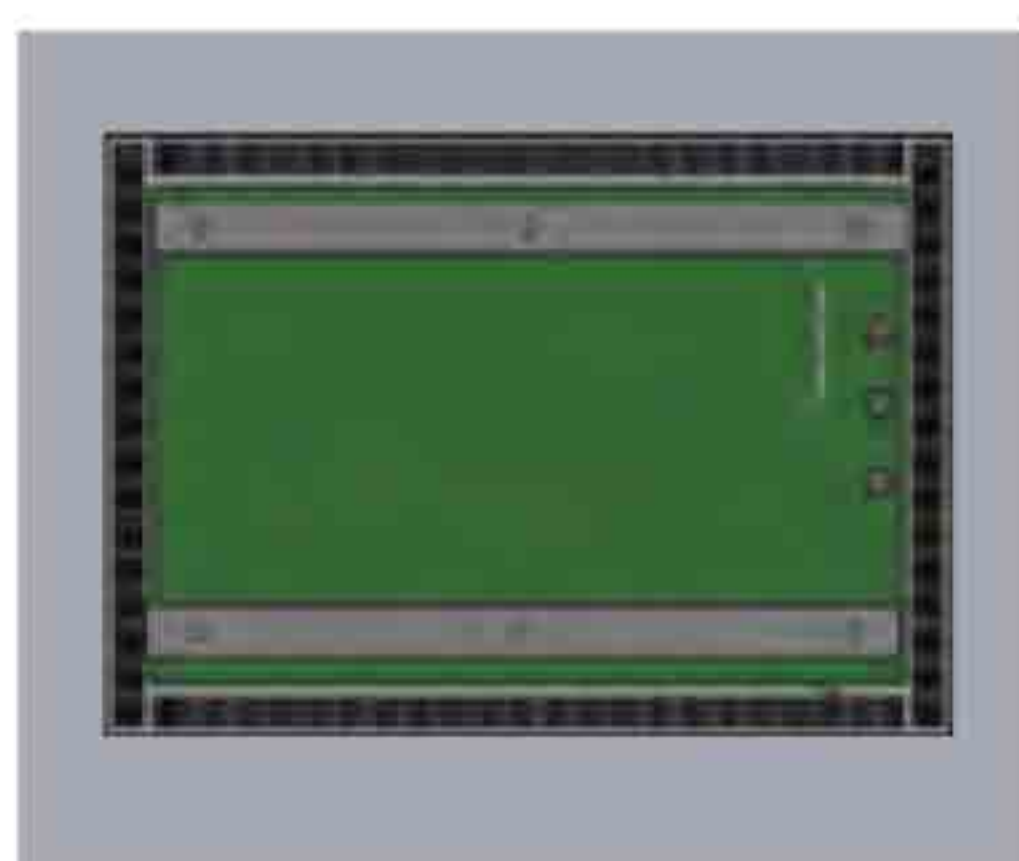
According to the overall standard of design dust-proof and water-proof IP55

- With a sun protection, heat insulation, roof ventilation
- With waterproof and the filtration dust inlet; the cabinet front door shutters with waterproof design, on the back of welding water tank, water tank installed above the net with quick release feature of the dust.



Security features

- Solid chassis box
- Fixed base case



Environmental adaptability

- Wide input voltage, avoids frequent switching to battery power because of large power grid voltage, reduce battery failure probability, adapt to the power environment in poor areas.
- Input Frequency Range 45 ~ 55Hz, to ensure the fuel generator can access all kinds of stability to meet user requirements for use on the oil machine.



Optional accessories

Heat exchanger

The environment which require higher IP level, we use heat exchanger to effectively reduce the temperature of box inside and improve IP protection level .



Heater and temperature controller

In response to low temperature climate impact of batteries and UPS, we adopt ajustable heating device to ensure the UPS and battery life of normal use.



Technical Specifications

Model	HW1K-11	HW2K-11	HW3K-11	HW6K-11	HW10K-11
Capacity	1KVA / 0.9KW	2KVA / 1.8KW	3KVA / 2.7KW	6KVA / 5.4KW	10KVA / 9KW
Nominal Voltage	220 / 230 / 240VAC				
Nominal Frequency	50Hz / 60Hz				
Input					
Voltage Range	115 ~ 295VAC			176 ~ 297VAC	
Frequency Range	50Hz: (46 ~ 54Hz) ; 60Hz: (56Hz ~ 64Hz)				
Soft Start	0 ~ 100% 5sec				
Power Factor	0.98				
Output					
Voltage Precision	220 / 230 / 240X (1±2%)VAC				
Frequency Precision	50 / 60Hz ±0.05Hz				
Power Factor	0.9				
Wave Distortion	Linear load <3% , Non-linear load <6%				
Overload Capability	Overload (110% ~ 150%) for 30 seconds, then automatically transfer to bypass. When load is normal, it can automatically transfer to normal mode.				
Crest Factor	3 : 1				
Transfer Time	0ms (AC to DC)				
Battery					
DC Supply Voltage	36VDC	96VDC	96VDC	240VDC	240VDC
Charge Current	4A / 8A (optional)	4A / 8A (optional)	4A / 8A (optional)	4.2A	4.2A
Internal Battery Capacity	(40 / 65 / 80 / 100AH) optional				
Panel Display					
LCD	Display input and output voltage, frequency, battery voltage, battery capacity, load percentage				
Communications					
Communicate Interface	RS232, SNMP card (optional)				
Work Environment					
Temperature	-40°C ~ +50°C				
Humidity	0 ~ 95% (Non-condensing)				
Storage Temperature	-25°C ~ 55°C				
Elevation	<1500m				
Physical Characteristics					
Weight (KG)	N.W	85	124	125	150
Dimensions (W x D x H)mm	613 x 640 x 954	650 x 753 x 1227	650 x 753 x 1227	940 x 940 x 1770	940 x 940 x 1770

STANDARD: Conform to GB/IEC regulation: EMC:GB7260.2/IEC62040-2 GB/17626.2~5/IEC61000-4-2~5 SAFETY:GB4943
 Note: Product specifications are subject to change without further notice.