



# PW31 SERIES

3 PHASE INPUT - 1 PHASE OUTPUT

## 10kVA - 20kVA ONLINE UPS

- High input power factor 0.99
- Low input current harmonic distortion (THDI)<5%
- High efficiency up to 94%
- Battery start feature
- Static and maintenance bypass feature
- Overload and short circuit protection system
- Standard emergency shutdown (EPO)
- 192 event logs (4500 alarms)
- Regenerative load feature calendar and clock
- Advanced automatic battery testing system
- Heat compensated battery charging system
- Ability to set modem for dial-up connection
- RS232 and dry contact interface for remote monitoring
- Modular structure with 3 DSP control
- Isolation transformer option at input and output according to the application
- SNMP compatible communication option
- Minimum footprint
- MODBUS compatible communication option
- Compliance with international standards (EC directive EN 62040)



• Product images may vary according to power values

### kVA = kW

10kVA	<b>10kW</b>
15kVA	<b>15kW</b>
20kVA	<b>20kW</b>

### USAGE AREAS

- HOME SYSTEMS
- OFFICES SYSTEMS
- IT SYSTEMS
- ULTRASON DEVICES
- SECURITY SYSTEMS
- MEDICAL DEVICES
- EPILATION DEVICES
- NETWORK SYSTEMS
- DIGITAL PRINTING
- X-RAY SYSTEMS



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	10	15	20
<b>Power kVA</b>	<b>10</b>	<b>15</b>	<b>20</b>
<b>Power kW</b>	<b>10</b>	<b>15</b>	<b>20</b>
<b>INPUT</b>			
Input Connection	Three-phase five-wire (3Φ + N + PE)		
Rated Voltage	380 / 400 / 415 V AC (220 V AC)		
Voltage Value	190 ~ 305 V AC (linear derating between 50% and 100% load); 305 ~ 499 V AC (no derating)		
Nominal Frequency	50 / 60 Hz (auto-sensing)		
Frequency Value	40 ~ 70 Hz		
Power Factor	≥ 0.99		
Bypass Voltage Value	-40% ~ +15% (settable)		
Total Harmonic Distortion (THDi)	≤ 5%		
<b>OUTPUT</b>			
Output Connection	Single-phase three-wire (1Φ + N + PE)		
Rated Voltage	208 (PF=0.9) / 220 / 230 / 240 V AC		
Voltage Regulation	± 1%		
Frequency	Synchronized to bypass in mains mode; 50 / 60 Hz ± 0.1% Hz in battery mode		
Waveform	Sinusoidal		
Power Factor	1		
Total Harmonic Distortion (THDv)	≤ 1% (linear load); ≤ 3% (non-linear load)		
Peak Factor	3:1		
Overload	105% ~ 110% for 10 min, 110% ~ 125% for 1 min, 126% ~ 150% for 30 sec		
<b>BATTERY</b>			
DC Voltage	192 V DC (192 ~ 240 V DC settable)		
Battery Number	16 pcs (16 ~ 20 settable)		
Internal Battery (standard model)	12V / 9 Ah × 16	/	/
Charging Current	Standard model: 1 A; Long time model: 5 A (default), 1 ~ 5 A settable; 10 A (optional)		
Charging Time	Standard model: 90% capacity restored in 8 hours; Long time model: depend on the capacity of battery		
<b>SYSTEM</b>			
Productivity	≥ 94% at 100% load, max. 95% at 60% load, ≥ 98% in ECO mode		
Transfer Time	0 ms		
Protections	Short-circuit, output overload, overtemperature, battery low voltage, overvoltage / undervoltage and fan failure		
Maximum Number of Parallel Connections	4		
Communication	RS232 (standard), USB / RS485 / dry contacts / SNMP / battery temperature compensation (optional)		
Screen	LCD + LED		
<b>OTHER</b>			
Operating Temperature	0°C ~ 40°C		
Storage Temperature	25°C ~ 55°C (without battery)		
Relative Humidity	0 ~ 95% (non-condensing)		
Altitude	≤ 1000 m, derating 1% for each additional 100 m		
IP Rating	IP20		
Noise Value at 1M Distance	≤ 58 Db		
Dimensions (W×D×H) (mm)	191 x 495 x 711 (S) 191 x 495 x 350 (L)	191 x 495 x 515 (L)	
Packaging Dimensions	310 x 685 x 941 (S) 318 x 617 x 475 (L)	285 x 593 x 618 (L)	
Net Weight (kg)	64 (S), 18.5 (L)	26.5 (L)	
Gross Weight (kg)	72 (S), 20 (L)	28 (L)	