

# UNINTERRUPTIBLE POWER SUPPLIES WALL MOUNTING, LONG BACK UP PERIOD

# POWER SOLVE

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## WM800 to WM4000 Series 800VA to 4000VA

Wall Mount 1600VA & 4000VA



Wall Mount 800VA & 1200VA



### General Features

- Line interactive with only 3mS transfer time
- Adjustable voltage transfer points and charging voltage
- Automatic restart of load after inverter shutdown
- Smart AVR function (two buck/boost modes)
- Wide AC input range of 140 to 310VAC for 230V version  
70 to 155VAC for 115V version
- Generator compatible & Cold start capable
- Fully functional LED or LCD display with audible alarm
- Smart battery management with high power charger  
Wet battery compatible
- Batteries (external) up to 500Ah typical
- Intelligent two stage charge control  
Adjustable charging current for different batteries
- Thermally controlled cooling fan
- DC to AC isolation
- Optional solar charger input (consult sales office)

### Model Ratings

| Model      | Rating       | AC Input & Output | Battery Voltage | Max Charge Current | Display | Weight in Kilos | Dimensions in mm |
|------------|--------------|-------------------|-----------------|--------------------|---------|-----------------|------------------|
| WM800-230  | 800VA/600W   | 230VAC            | 12VDC           | 20A                | LED     | 10              | 120 x 250 x 370  |
| WM1200-230 | 1200VA/900W  | 230VAC            | 12VDC           | 30A                | LED     | 13              | 120 x 250 x 370  |
| WM1600-230 | 1600VA/1200W | 230VAC            | 24VDC           | 25A                | LCD     | 15              | 200 x 410 x 300  |
| WM2400-230 | 2400VA/1800W | 230VAC            | 24VDC           | 35A                | LCD     | 26              | 200 x 410 x 300  |
| WM3200-230 | 3200VA/2400W | 230VAC            | 36VDC           | 30A                | LCD     | 34              | 200 x 410 x 300  |
| WM4000-230 | 4000VA/3000W | 230VAC            | 48VDC           | 30A                | LCD     | 41              | 200 x 410 x 300  |
| WM800-115  | 800VA/600W   | 115VAC            | 12VDC           | 20A                | LED     | 10              | 120 x 250 x 370  |
| WM1200-115 | 1200VA/900W  | 115VAC            | 12VDC           | 30A                | LED     | 13              | 120 x 250 x 370  |
| WM1600-115 | 1600VA/1200W | 115VAC            | 24VDC           | 25A                | LCD     | 15              | 200 x 410 x 300  |
| WM2400-115 | 2400VA/1800W | 115VAC            | 24VDC           | 35A                | LCD     | 26              | 200 x 410 x 300  |
| WM3200-115 | 3200VA/2400W | 115VAC            | 36VDC           | 30A                | LCD     | 34              | 200 x 410 x 300  |

**Note: WM4000 is only available with 230VAC output, 115VAC version not available**

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## Electrical Specification

### Input

|                                |  |
|--------------------------------|--|
| Nominal AC Input:              | 230VAC or 115VAC (115VAC not available on 4000VA unit)<br>200V/220V/230V/240V or 100V/110V/115V/120V Selectable                        |
| Input Frequency:               | 47 to 65 Hz, 50/60 auto sensing  |
| Efficiency::                   | 97% normal mode, 85% under battery power   |
| Noise Filtering:               | Full time EMI/RFI filtering  |
| Overcurrent Protection:        | 230V models 800VA/1200VA fuse protected, all others resettable trip  |
| Voltage Range:                 | 230V models 140V-310V, 115V models 70-155V   |
| AVR Range (2 Bucks, 2 Boosts): | Enhanced Buck: +28% of selected V, Buck Mode: +10% of selected V<br>Boost Mode: -10% of selected V, Enhanced Boost: -25% of selected V |
| Surge Protection:              | 230V models 800VA/1200VA: 220 Joules, 1600VA-4000VA: 440 Joules<br>115V models 800VA/1200VA: 216 Joules, 1600VA-3200VA: 324 Joules     |

### Output

|                             |  |
|-----------------------------|--|
| Output Power:               | See model rating table   |
| Output Voltage:             | 200V/220V/230V/240V or 100V/110V/115V/120V Selectable                        |
| Output Waveform:            | Pure Sine Wave   |
| Crest Factor:               | 3:1  |
| Output Frequency:           | Auto Select for 50/60Hz, synchronised to incoming AC mains supply            |
| Regulation (nominal):       | ±10% typical of nominal voltage  |
| Regulation (under battery): | ±3% of selected output voltage (adjustable with remote set-up software)      |
| Transfer Time:              | Blackout: 3mS typical, Brownout: 1mS typical, Battery to Normal: 1mS typical |
| Over Current Protection:    | Overload Alarm: 100-120%, Overload shutdown: 120-190% (adjustable)           |

### Battery

|                           |  |
|---------------------------|--|
| Battery Type:             | Lead Acid 50Ah to 500Ah (recommended)  |
| Typical back up time:     | No limit, depends on batteries used (externally)   |
| Charging Method:          | Smart pulse charging with two charging modes. Quick charging when battery is not fully charged, trickle charge when battery is 90% fully charged   |
| Maximum Charging Current: | See table  |
| Average Charging Voltage: | Fast charging: 14V, 28V, 42V or 56V depending on battery voltage<br>Float charging: 13.5V, 27V, 40.5V or 54V (adjustable with set up software)   |
| Protection:               | Over current protection & Over charging protection (SCR control)<br>Thermal protection (CPU control), when temperature inside the unit is higher than 45°C, charger will stop for 2 minutes, followed by 2 minutes charging. The cycle will be repeated until temperature drops. |
| Monitoring:               | Smart monitoring & warning for failed battery or open-circuit battery.<br>Auto detection each time when power on or over 6 days  |

### Communications & Management

|  |   |
|--|---|
| Standard Interface Port:                             | UPSilon2000 compatible, optional RS232 and or USB   |
| Optional Interface Port:                             | RJ45 (surge protection), DB9, SNMP (external type)  |
| Control Panel:                                       | LED 800VA/1200VA, LCD others  |
| Audible Alarm:                                       | Low Battery & Battery Overvoltage, Over load, Short Circuit, Over Temp                            |
| Green Mode Function:<br>(auto shut off in black out) | 1% to 14% of full load (adjustable by using remote set up software)<br>The default setting is off |
| Cooling:   | Temperature controlled fan  |

### Environment

|                        |                         |
|------------------------|-------------------------|
| Operating Temperature: | 0° to 40°C              |
| Storage Temperature:   | -15° to +55°C           |
| Relative Humidity:     | 5 to 95% non condensing |
| Operating Altitude     | 0 to 3000 metres        |

### Dimensions & Weight

See table