

**Online UPS**  
**E-Series** (Environmental Friendly)  
 5-10 KVA(1/1)



**AVO HIGH POWER  
 HP 1000**

**Application:**

Computer/critical servers/data center/hub & other network device/LAN/WAN.

**Control Panel**



- 1 LCD
- 2 ON/OFF Button
- 3 Self-test/Silence Button
- 4 Scroll Button
- 5 Normal
- 6 Alarm
- 7 Abnormal

**FEATURES**

- True double-conversion
- Microprocessor control optimizes reliability
- Input power factor correction
- Output power factor 0.8
- Wide input voltage
- Converter mode available
- Generator compatible
- Adjustable battery number only available for 6K and up models
- Smart SNMP works well with either USB or RS-232 together
- Comprehensive display allows easy monitoring and access of UPS status
- Optional isolation transformer available. (Please check sales directly)

# TECHNICAL SPECIFICATIONS

| MODEL                                 |                         | HP1005  |               | HP1006                             |               | HP1008                             |            | HP1010                             |            |
|---------------------------------------|-------------------------|---|---------------|------------------------------------|---------------|------------------------------------|------------|------------------------------------|------------|
| PHASE                                 |                         | Single phase with ground  |               |                                    |               |                                    |            |                                    |            |
| CAPACITY*                             |                         | 5000 VA / 4000 W  |               | 6000VA / 4800W                     |               | 8000 VA / 6400 W                   |            | 10000 VA / 8000 W                  |            |
| <b>INPUT</b>                          |                         |   |               |                                    |               |                                    |            |                                    |            |
| Nominal Voltage                       |                         | 208/220/230/240VAC  |               |                                    |               |                                    |            |                                    |            |
| Input Voltage Range                   |                         | 110-300 VAC (Based on load at 50%)<br>176-300 VAC (Based on load at 100%)           |               |                                    |               |                                    |            |                                    |            |
| Frequency Range(Synchronized Mode)    |                         | 46-54 Hz or 56-64 Hz  |               |                                    |               |                                    |            |                                    |            |
| Power Factor                          |                         | ≥0.99 @ Nominal Voltage (100% load)   |               |                                    |               |                                    |            |                                    |            |
| <b>OUTPUT</b>                         |                         |   |               |                                    |               |                                    |            |                                    |            |
| Output Voltage                        |                         | 208/220/230/240VAC  |               |                                    |               |                                    |            |                                    |            |
| Voltage Regulation                    |                         | ±1 %  |               |                                    |               |                                    |            |                                    |            |
| Frequency Range (Synod-ionized Range) |                         | 46-54 Hz or 56-64 Hz  |               |                                    |               |                                    |            |                                    |            |
| Frequency Range (Batt. Mode)          |                         | 50 Hz or 60Hz ± 0.1 Hz  |               |                                    |               |                                    |            |                                    |            |
| Current Crest Ratio                   |                         | 3:1   |               |                                    |               |                                    |            |                                    |            |
| Harmonic Distortion                   |                         | ≤3 % THD (Linear Load)<br>≤5 % THD (Non-linear Load)                                |               |                                    |               |                                    |            |                                    |            |
| Transfer Time                         | AC Mode to Battery Mode | Zero  |               |                                    |               |                                    |            |                                    |            |
|                                       | Inverter to Bypass      | Zero  |               |                                    |               |                                    |            |                                    |            |
| Waveform (Batt. Mode)                 |                         | Pure Sinewave   |               |                                    |               |                                    |            |                                    |            |
| <b>EFFICIENCY</b>                     |                         |   |               |                                    |               |                                    |            |                                    |            |
| AC Mode                               |                         | 92%   |               | 92%                                |               | 93%                                |            | 93%                                |            |
| Battery Mode                          |                         | 90%   |               | 90%                                |               | 91%                                |            | 91%                                |            |
| <b>BATTERY</b>                        |                         |   |               |                                    |               |                                    |            |                                    |            |
| Standard Model                        | Battery Type            | 12 V/ 9 Ah  |               | 12 V/ 9Ah                          |               | 12 V/ 9Ah                          |            | 12 V/ 9Ah                          |            |
|                                       | Numbers                 | 16  | 20            | 16                                 | 20            | 16                                 | 20         | 16                                 | 20         |
|                                       | Typical Recharge Time   | 9 hours recover to 90% capacity   |               |                                    |               |                                    |            |                                    |            |
|                                       | Charging Current (max.) | 1A/2A/4A/6A/8A/10A(Adjustable)  |               |                                    |               |                                    |            |                                    |            |
|                                       | Charging Voltage        | 218.4VDC ±1%  | 273VDC ±1%    | 218.4VDC ±1%                       | 273VDC ±1%    | 218.4VDC ±1%                       | 273VDC ±1% | 218.4 VDC ±1%                      | 273 VDC±1% |
| Long-run Model "                      | Battery Type            | Depending on the capacity of external batteries                                     |               |                                    |               |                                    |            |                                    |            |
|                                       | Numbers                 | 16 - 20 (Adjustable)  |               |                                    |               |                                    |            |                                    |            |
|                                       | Charging Current (max.) | 1A2A/4A/6A/8A/10A (Adjustable)  |               |                                    |               |                                    |            |                                    |            |
|                                       | Charging Voltage        | 218.4VDC ±1%  | 273VDC ±1%    | 218.4VDC ±1%                       | 273VDC ±1%    | 218.4VDC ±1%                       | 273VDC ±1% | 218.4VDC ±1%                       | 273VDC ±1% |
| <b>INDICATORS</b>                     |                         |   |               |                                    |               |                                    |            |                                    |            |
| LCD                                   |                         | Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicators |               |                                    |               |                                    |            |                                    |            |
| <b>ALARM</b>                          |                         |   |               |                                    |               |                                    |            |                                    |            |
| Battery Mode                          |                         | Sounding every 4 seconds  |               |                                    |               |                                    |            |                                    |            |
| Low Battery                           |                         | Sounding every second   |               |                                    |               |                                    |            |                                    |            |
| Overload                              |                         | Sounding twice every second   |               |                                    |               |                                    |            |                                    |            |
| Fault                                 |                         | Continuously sounding   |               |                                    |               |                                    |            |                                    |            |
| <b>PHYSICAL</b>                       |                         |   |               |                                    |               |                                    |            |                                    |            |
| Standard Model                        | Dimension,D x W x H(mm) | 369 x 190 x 688   | 442 x 190x688 | 369 x 190 x 688                    | 442 x 190x688 | 442 x 190x688                      |            | 442 x 190x688                      |            |
|                                       | Net Weight (kgs)        | 61  | 74            | 61                                 | 74            | 76                                 |            | 78                                 |            |
| Long-run Model "                      | Dimension,D x W x H(mm) | 369 x 190 x 318   |               | 369 x 190 x 318                    |               | 442 x 190 x 318                    |            | 442 x 190 x 318                    |            |
|                                       | Net Weight (kgs)        | 12  |               | 12                                 |               | 16                                 |            | 16                                 |            |
| <b>ENVIRONMENT</b>                    |                         |   |               |                                    |               |                                    |            |                                    |            |
| Humidity                              |                         | 0-95% RH 0-50°C @ (non-condensing)  |               | 0-95% RH 0-50°C @ (non-condensing) |               | 0-95% RH 0-50°C @ (non-condensing) |            | 0-95% RH 0-50°C @ (non-condensing) |            |
| Noise Level                           |                         | Less than 55dBA @ 1 Meter   |               | Less than 55dBA @ 1 Meter          |               | Less than 55dBA @ 1 Meter          |            | Less than 58dBA @ 1 Meter          |            |
| <b>MANAGEMENT</b>                     |                         |   |               |                                    |               |                                    |            |                                    |            |
| Smart RS-232 / USB                    |                         | Supports Windows® 2000/2003/XP/Vista/2008, Windows. 7/8, Linux, Unix and MAC        |               |                                    |               |                                    |            |                                    |            |
| Optional SNMP                         |                         | Power management from SNMP manager and web browser                                  |               |                                    |               |                                    |            |                                    |            |

- All specifications are subject to change without prior notice.
- Custom-made specifications are acceptable.



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