



Наличие и актуальные цены на

**HRP-100-3.3**

<https://www.mean-well.ru/store/HRP-100-3.3/>



## 100W Single Output with PFC Function

# HRP-100 series



### ■ Features :

- Universal AC input / Full range
- Built-in active PFC function
- High efficiency up to 90%
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage
- Protections: Over temperature (optional)
- Cooling by free air convection
- 1U low profile 38mm
- Built-in remote ON-OFF control
- No load power consumption<0.5W
- All using 105°C long life electrolytic capacitors
- 5 years warranty

User's Manual



### ■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



### SPECIFICATION

UL62368-1 BS EN/EN62368-1 TPTC004 IEC62368-1

| MODEL                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | HRP-100-3.3                                                                                                                                                                              | HRP-100-5   | HRP-100-7.5 | HRP-100-12   | HRP-100-15  | HRP-100-24   | HRP-100-36   | HRP-100-48   |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|--------------|-------------|--------------|--------------|--------------|
| OUTPUT                                  | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3.3V                                                                                                                                                                                     | 5V          | 7.5V        | 12V          | 15V         | 24V          | 36V          | 48V          |
|                                         | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 20A                                                                                                                                                                                      | 17A         | 13.5A       | 8.5A         | 7A          | 4.5A         | 2.9A         | 2.2A         |
|                                         | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0 ~ 20A                                                                                                                                                                                  | 0 ~ 17A     | 0 ~ 13.5A   | 0 ~ 8.5A     | 0 ~ 7A      | 0 ~ 4.5A     | 0 ~ 2.9A     | 0 ~ 2.2A     |
|                                         | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 66W                                                                                                                                                                                      | 85W         | 101.3W      | 102W         | 105W        | 108W         | 104.4W       | 105.6W       |
|                                         | RIPPLE & NOISE (max.) <small>Note.2</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 80mVp-p                                                                                                                                                                                  | 80mVp-p     | 100mVp-p    | 120mVp-p     | 150mVp-p    | 150mVp-p     | 200mVp-p     | 240mVp-p     |
|                                         | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3.1 ~ 3.8V                                                                                                                                                                               | 4.75 ~ 5.8V | 7.1 ~ 9V    | 11.4 ~ 13.8V | 14.25 ~ 18V | 22.8 ~ 28.8V | 34.2 ~ 39.6V | 45.6 ~ 55.2V |
|                                         | VOLTAGE TOLERANCE <small>Note.3</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ±2.5~3.5%                                                                                                                                                                                | ±2.5%       | ±2.5%       | ±1.5%        | ±1.5%       | ±1.5%        | ±1.5%        | ±1.5%        |
|                                         | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ±0.5%                                                                                                                                                                                    | ±0.5%       | ±0.5%       | ±0.3%        | ±0.3%       | ±0.2%        | ±0.2%        | ±0.2%        |
|                                         | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ±2.0%                                                                                                                                                                                    | ±2.0%       | ±1.5%       | ±0.8%        | ±0.8%       | ±0.5%        | ±0.5%        | ±0.5%        |
|                                         | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2500ms, 100ms/230VAC      2500ms, 100ms/115VAC at full load                                                                                                                              |             |             |              |             |              |              |              |
| HOLD UP TIME (Typ.)                     | 50ms/230VAC      20ms/115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                          |             |             |              |             |              |              |              |
| INPUT                                   | VOLTAGE RANGE <small>Note.5</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 85 ~ 264VAC      120 ~ 370VDC                                                                                                                                                            |             |             |              |             |              |              |              |
|                                         | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 47 ~ 63Hz                                                                                                                                                                                |             |             |              |             |              |              |              |
|                                         | POWER FACTOR (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PF>0.95/230VAC      PF>0.98/115VAC at full load                                                                                                                                          |             |             |              |             |              |              |              |
|                                         | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 78%                                                                                                                                                                                      | 83%         | 84%         | 87.5%        | 88%         | 88.5%        | 89%          | 90%          |
|                                         | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1.1A/115VAC      0.6A/230VAC                                                                                                                                                             |             |             |              |             |              |              |              |
|                                         | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 35A/115VAC      65A/230VAC                                                                                                                                                               |             |             |              |             |              |              |              |
| PROTECTION                              | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <1mA / 240VAC                                                                                                                                                                            |             |             |              |             |              |              |              |
|                                         | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 105 ~ 135% rated output power<br>Protection type : Constant current limiting for Vo=50 ~ 100% of rated voltage, recovers automatically after fault condition is removed                  |             |             |              |             |              |              |              |
|                                         | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3.96 ~ 4.62V    6 ~ 7V      9.4 ~ 10.9V    14.4 ~ 16.8V    18.8 ~ 21.8V    30 ~ 34.8V    41.4 ~ 48.6V    57.6 ~ 67.2V<br>Protection type : Shut down o/p voltage, re-power on to recover |             |             |              |             |              |              |              |
|                                         | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Shut down o/p voltage, recovers automatically after temperature goes down                                                                                                                |             |             |              |             |              |              |              |
| FUNCTION                                | REMOTE CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | RC+/RC- : 0 ~ 0.8V= power on ; 4 ~ 10V = power off                                                                                                                                       |             |             |              |             |              |              |              |
| ENVIRONMENT                             | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | -40 ~ +60℃ (Refer to "Derating Curve")                                                                                                                                                   |             |             |              |             |              |              |              |
|                                         | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 20 ~ 90% RH non-condensing                                                                                                                                                               |             |             |              |             |              |              |              |
|                                         | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | -40 ~ +85℃, 10 ~ 95% RH                                                                                                                                                                  |             |             |              |             |              |              |              |
|                                         | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ±0.04%/℃ (0 ~ 50℃)                                                                                                                                                                       |             |             |              |             |              |              |              |
|                                         | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes                                                                                                                             |             |             |              |             |              |              |              |
| SAFETY & EMC<br><small>(Note 4)</small> | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | UL62368-1,TUV BS EN/EN62368-1, AS/NZS62368.1, EAC TP TC 004 approved                                                                                                                     |             |             |              |             |              |              |              |
|                                         | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC                                                                                                                                          |             |             |              |             |              |              |              |
|                                         | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH                                                                                                                                |             |             |              |             |              |              |              |
|                                         | EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Compliance to BS EN/EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020                                                                                                             |             |             |              |             |              |              |              |
| OTHERS                                  | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11,BS EN/EN55035,BS EN/EN61000-6-2,heavy industry level,EAC TP TC 020                                                                          |             |             |              |             |              |              |              |
|                                         | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2344.3K hrs min.    Telcordia SR-332 (Bellcore) ; 295.8K hrs min.    MIL-HDBK-217F (25℃)                                                                                                 |             |             |              |             |              |              |              |
|                                         | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 159*97*38mm (L*W*H)                                                                                                                                                                      |             |             |              |             |              |              |              |
|                                         | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.56Kg; 24pcs/15Kg/0.9CUFT                                                                                                                                                               |             |             |              |             |              |              |              |
| NOTE                                    | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F & 47 μ F parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."<br>(as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a> )<br>5. Derating may be needed under low input voltages. Please check the derating curve for more details.<br>6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).<br>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |                                                                                                                                                                                          |             |             |              |             |              |              |              |

## Mechanical Specification

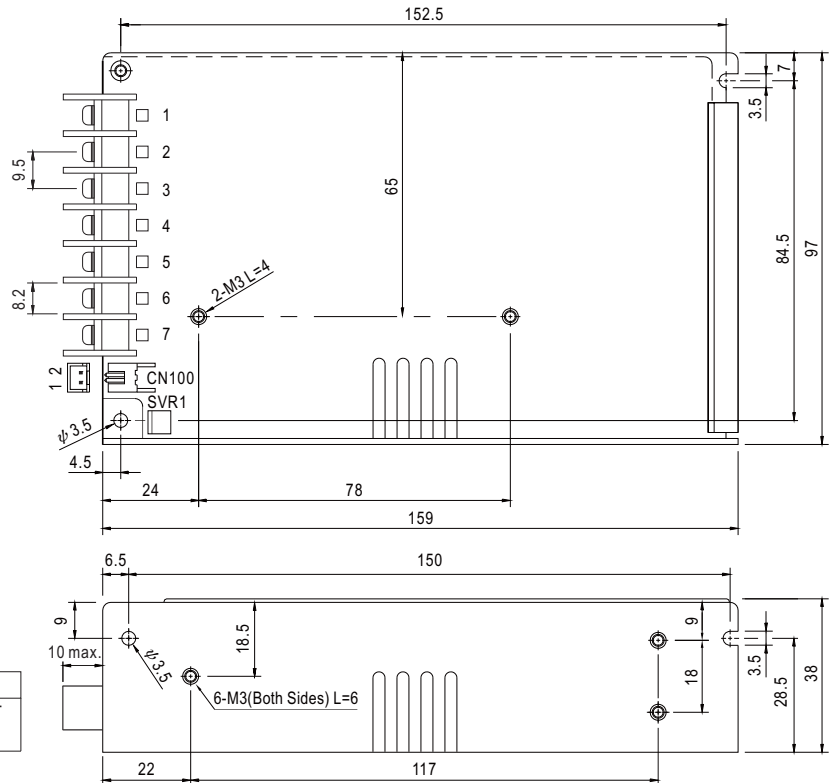
Case No.901I Unit:mm

Terminal Pin No. Assignment

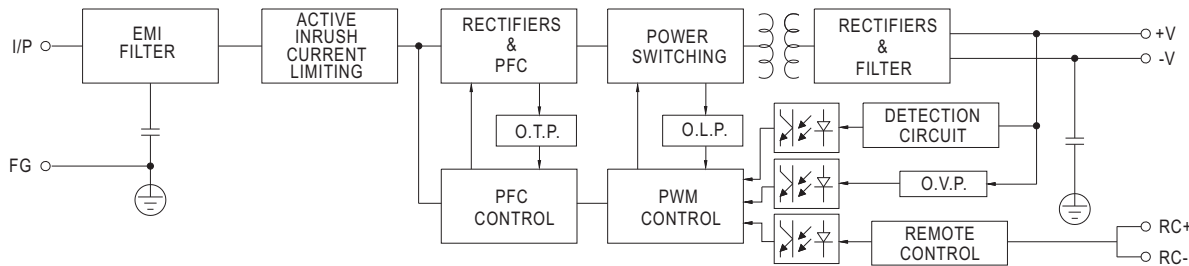
| Pin No. | Assignment | Pin No. | Assignment   |
|---------|------------|---------|--------------|
| 1       | AC/L       | 4,5     | DC OUTPUT -V |
| 2       | AC/N       | 6,7     | DC OUTPUT +V |
| 3       | FG $\perp$ |         |              |

Remote ON/OFF (CN100) : JST B-XH or equivalent

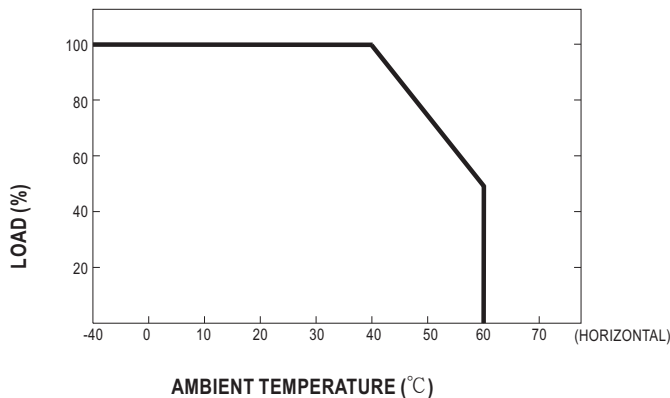
| Pin No. | Assignment | Mating Housing        | Terminal                   |
|---------|------------|-----------------------|----------------------------|
| 1       | RC-        | JST XHP or equivalent | JST SXH-001T or equivalent |
| 2       | RC+        |                       |                            |



## Block Diagram



## Derating Curve



## Output Derating VS Input Voltage

