



Features

- Universal AC input / Full range
- Class II power unit, no FG
- Built-in active PFC function
- High efficiency up to 94%
- No load power consumption <0.15W
- Energy efficiency Level VI
- Comply with EU Erp and CoC Version 5
- Fully isolated plastic case with IP67
- Fanless design, cooling by free air convection
- Protections: Short circuit / Over current / Over voltage / Over temperature
- UL LISTED, suitable for dry and damp locations
- 5 years warranty
- Various DC plug quick adapter accessory available
(Plug kit sold sperately, please refer to : https://www.meanwell.com/upload/pdf/DC_plug.pdf)

Applications

- Industrial field PC adaptor
- POS or KIOSK system
- Portable Battery charger
- Electric Lawn mower charger
- General electronic products in dusty or humid environment
- Household Device

GTIN CODE

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

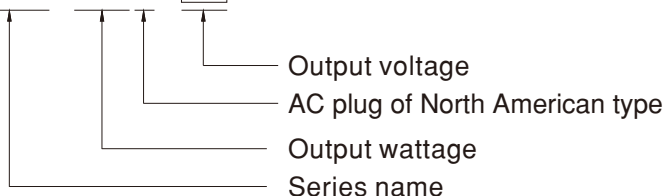
Description

OWA-200U is one 200W single-output external power supply series. Pairing the North American type of AC plug and the prevailing DC connectors, OWA-200U, working like an adaptor, simplifies the connection with any electric device which needs waterproof function. The entire series is certified with the "UL LISTED" for dry and damp locations.

As a class II (no FG) design, the enclosure of OWA-200U is a 94V-0 flame retardant plastic case. The interior is fully potted with silicone that enhances the heat dissipation. With the working efficiency up to 94%, OWA-200U is cooled by free air convection; the working temperature ranges from -40°C to +70°C.

Model Encoding

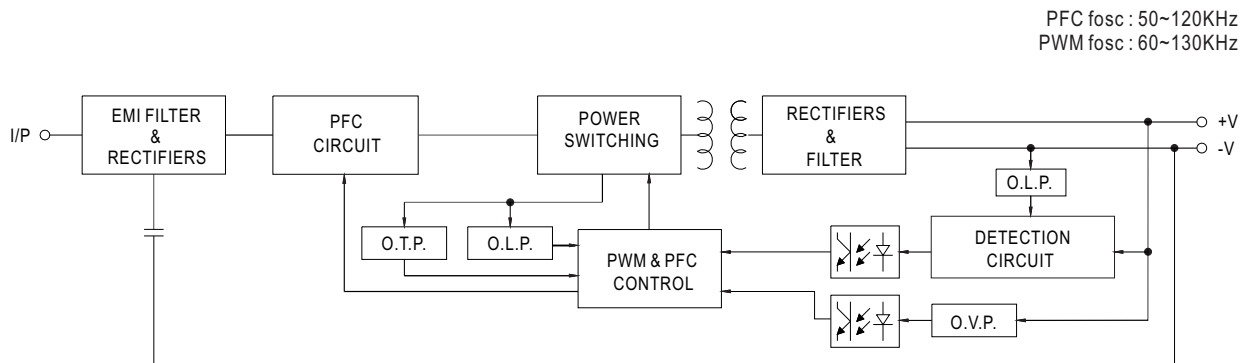
OWA - 200U - 12



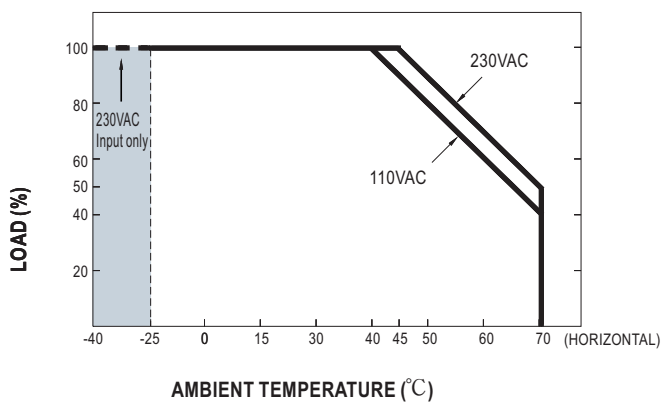
SPECIFICATION

| MODEL | | OWA-200U-12 | OWA-200U-20 | OWA-200U-24 | OWA-200U-36 | OWA-200U-42 | OWA-200U-48 | OWA-200U-54 | |
|------------------|---|--|---|-------------|-------------|-------------|-------------|-------------|----------|
| OUTPUT | DC VOLTAGE | 12V | 20V | 24V | 36V | 42V | 48V | 54V | |
| | RATED CURRENT | 15A | 10A | 8.3A | 5.55A | 4.75A | 4.17A | 3.71A | |
| | RATED POWER | 180W | 200W | 199W | 199W | 199W | 200W | 200W | |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 150mVp-p | 150mVp-p | 150mVp-p | 200mVp-p | 250mVp-p | 250mVp-p | 350mVp-p | |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ± 5.0% | ± 4.0% | ± 4.0% | ± 3.0% | ± 3.0% | ± 3.0% | ± 3.0% | |
| | LINE REGULATION | ± 0.5% | ± 0.5% | ± 0.5% | ± 0.5% | ± 0.5% | ± 0.5% | ± 0.5% | |
| | LOAD REGULATION | ± 5.0% | ± 4.0% | ± 4.0% | ± 3.0% | ± 3.0% | ± 3.0% | ± 3.0% | |
| | SETUP, RISE TIME <small>Note.4</small> | 500ms, 80ms 230VAC / 115VAC | | | | | | | |
| | HOLD UP TIME (Typ.) | 10ms at full load 230VAC / 115VAC | | | | | | | |
| INPUT | VOLTAGE RANGE | | 100 ~ 264VAC 142 ~ 370VDC | | | | | | |
| | FREQUENCY RANGE | | 47 ~ 63Hz | | | | | | |
| | POWER FACTOR (Typ.) | | PF>0.97/115VAC, PF>0.96/230VAC at full load | | | | | | |
| | EFFICIENCY (Typ.) | 115VAC | 88.5% | 90% | 90.5% | 91.5% | 91.5% | 91.5% | 91.5% |
| | | 230VAC | 91% | 92.5% | 93% | 94% | 94% | 94% | 94% |
| | AC CURRENT (Typ.) | | 2.2A / 115VAC 1.1A / 230VAC | | | | | | |
| | INRUSH CURRENT (Typ.) | | COLD START 90A(twidth=300μs measured at 50% Ipeak) at 115VAC COLD START 180A(twidth=450μs measured at 50% Ipeak) at 230VAC | | | | | | |
| | LEAKAGE CURRENT | | <0.125mA / 120VAC <0.25mA / 240VAC | | | | | | |
| | NO LOAD CONSUMPTION | | <0.15W | | | | | | |
| PROTECTION | OVER CURRENT | | 105% ~ 150% | | | | | | |
| | | | Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | |
| | SHORT CIRCUIT | | Hiccup mode, recovers automatically after fault condition is removed | | | | | | |
| | OVER VOLTAGE | | 13 ~ 18V | 22 ~ 27V | 27 ~ 34V | 41 ~ 49V | 46 ~ 57V | 52 ~ 65V | 59 ~ 70V |
| | | | Protection type : Shut down o/p voltage, re-power on to recover | | | | | | |
| OVER TEMPERATURE | | Shut down o/p voltage, re-power on to recover | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | | -40 ~ +70°C (Refer to "Derating Curve") | | | | | | |
| | WORKING HUMIDITY | | 20 ~ 95% RH non-condensing | | | | | | |
| | STORAGE TEMP., HUMIDITY | | -40 ~ +80°C, 10 ~ 95% RH | | | | | | |
| | TEMP. COEFFICIENT | | ± 0.03%/°C (0 ~ 50°C) | | | | | | |
| | VIBRATION | | 10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes | | | | | | |
| SAFETY & EMC | SAFETY STANDARDS | | UL62368-1; IP67(for power body) approved; Design refer with UL1012 | | | | | | |
| | WITHSTAND VOLTAGE | | I/P-O/P:4.2KVAC | | | | | | |
| | ISOLATION RESISTANCE | | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH | | | | | | |
| | EMC EMISSION | | Compliance to FCC Part15 | | | | | | |
| OTHERS | MTBF | | 2680.8K hrs min. Telcordia SR-332 (Bellcore) 268.5K hrs min. MIL-HDBK-217F (25°C) | | | | | | |
| | DIMENSION | | 195*68*39.5mm | | | | | | |
| | PACKING | | 1.32Kg; 9 pcs/ 11.74 Kg/ 0.79 CUFT | | | | | | |
| NOTE | | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. 5. For battery charging purpose had better operation with a BMS controller. ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx | | | | | | | |

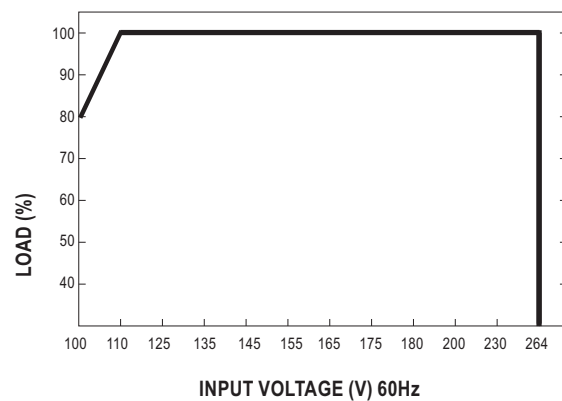
Block Diagram



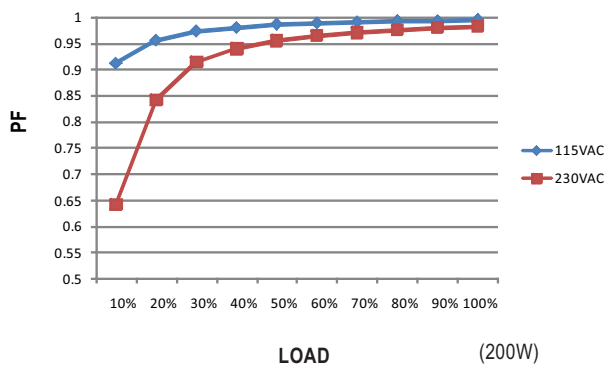
Derating Curve



Static Characteristics

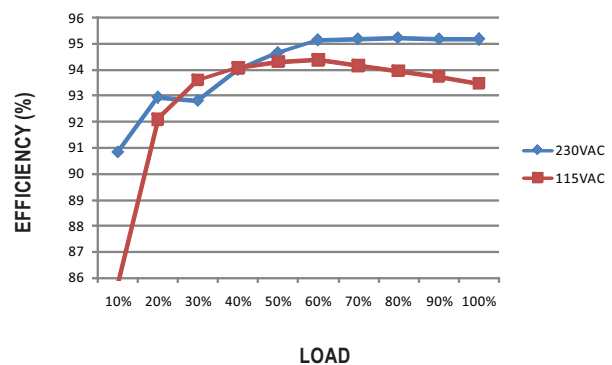


Power Factor Characteristic



EFFICIENCY vs LOAD (48V Model)

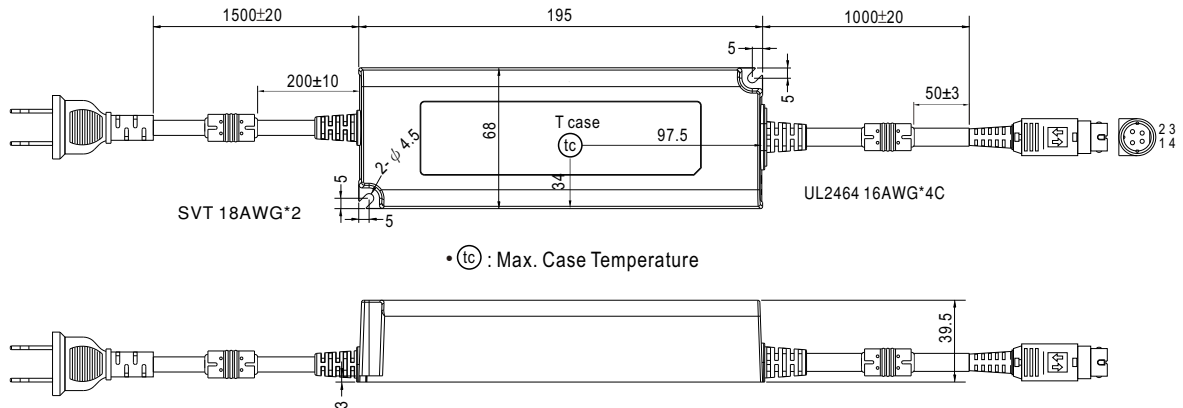
OWA-200 series possess superior working efficiency that up to 94% can be reached in field applications.



Mechanical Specification

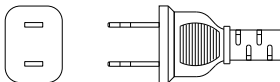
Case No. PWM-200

Unit:mm




Input Plug Type

All models : NEMA 1-15p male plug

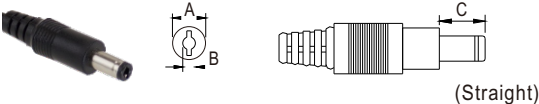
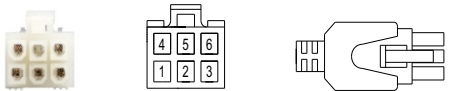


DC output plug




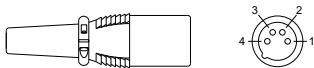
Standard plug:

| KYCON KPPX-4P equivalent | Type No. | Pin Assignment | | Available for all model (Current rating: 15A max.) |
|---|----------|----------------|--------|---|
| | | PIN No. | Output | |
|  | R7B | 1 | +Vo | |
| | | 2 | -Vo | |
| | | 3 | -Vo | |
| | | 4 | +Vo | |

Optional DC plug:

| Tuning Fork Style | Type No. | A | B | C | Adaptation model |
|---|----------|----------------|--------|---|---|
| | | OD | ID | L | |
|  (Straight) | P1J | 5.5 | 2.1 | 11.0 | Available for 36V/48V/54V (Current rating: 7.5A max.) |
| | P1M | 5.5 | 2.5 | 11.0 | |
| MOLEX 39-01-2060 (4.2mm) equivalent | Type No. | Pin Assignment | | Available for all model (Current rating: 15A max.) | |
|  FG not connected to output connector | C6P | PIN No. | Output | | |
| | | 1 | +Vo | | |
| | | 2 | +Vo | | |
| | | 3 | +Vo | | |
| | | 4 | -Vo | | |
| | | 5 | -Vo | | |
| | | 6 | -Vo | | |

FG not connected to output connector

| NEUTRIK XLR NC4FX equivalent | Type No. | Pin Assignment | | Available for all model (Current rating: 15A max.) |
|---|----------|----------------|--------|--|
| | | PIN No. | Output | |
|  | MIC4 | 1 | +Vo | |
| | | 2 | +Vo | |
| | | 3 | -Vo | |
| | | 4 | -Vo | |
| LLT-M19-20002F307 equivalent | Type No. | Pin Assignment | | Available for all model (Current rating: 15A max.) |
| | | PIN No. | Output | |
|  | M19 | 1 | +Vo | |
| | | 2 | -Vo | |
| DW-M15-02F equivalent | Type No. | Pin Assignment | | Available for 20V/24V/36V/48V/54V (Current rating: 10A max.) |
| | | PIN No. | Output | |
|  | M15 | 1 | +Vo | |
| | | 2 | -Vo | |
| XLR4P, NEUTRIK NC4MX equivalent | Type No. | Pin Assignment | | Available for all model (Current rating: 15A max.) |
| | | PIN No. | Output | |
|  | XLR4P | 1 | +Vo | |
| | | 2 | +Vo | |
| | | 3 | -Vo | |
| | | 4 | -Vo | |

※ For details, please contact MEAN WELL.

■ Recommend Mounting Direction



■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>