



UL62368-1

## ■ 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 separately, please refer to : [https://www.meanwell.com/upload/pdf/DC\\_plug.pdf](https://www.meanwell.com/upload/pdf/DC_plug.pdf) )

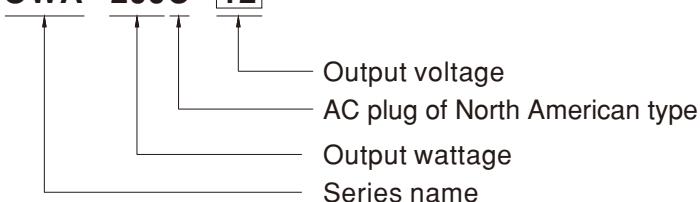
## ■ Description

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



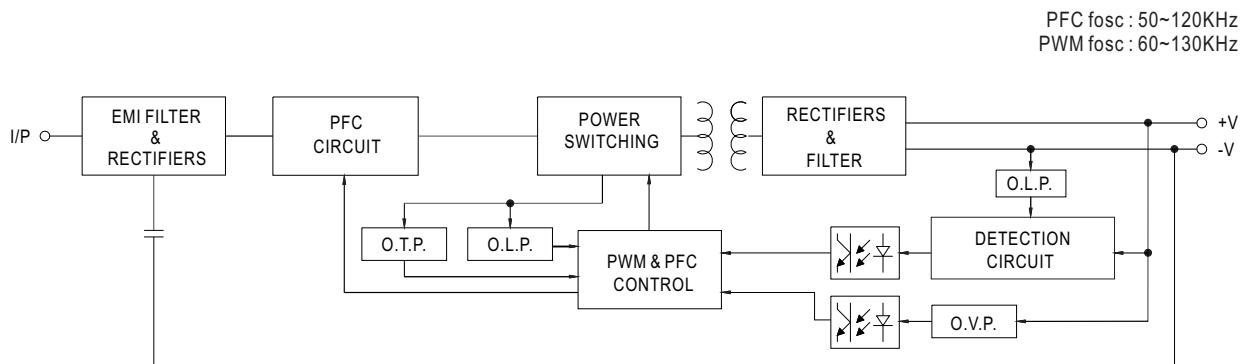
## ■ Applications

- 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

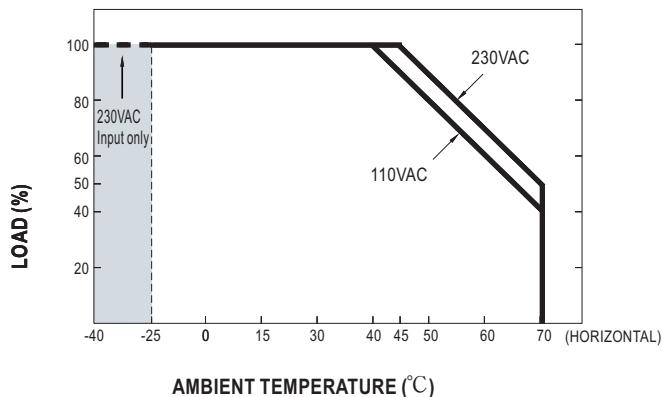
## SPECIFICATION

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
	RIPLPE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p	250mVp-p	350mVp-p
	VOLTAGE TOLERANCE Note.3	±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 Note.4	500ms, 80ms	230VAC / 115VAC					
INPUT	HOLD UP TIME (Typ.)	10ms at full load	230VAC / 115VAC					
	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%
		230VAC	91%	92.5%	93%	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						
PROTECTION	LEAKAGE CURRENT	<0.125mA / 120VAC <0.25mA / 240VAC						
	NO LOAD CONSUMPTION	<0.15W						
	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						
ENVIRONMENT	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						
SAFETY & EMC	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover						
	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)						
OTHERS	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes						
	SAFETY STANDARDS	UL62368-1; IP67(for power body) approved; Design refer with UL1012						
	WITHSTAND VOLTAGE	I/P-O/P:4.2KVAC						
EMC	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH						
	EMC EMISSION	Compliance to FCC Part15						
NOTE	MTBF	851.3 K hrs min. 268.5 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 <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a>						

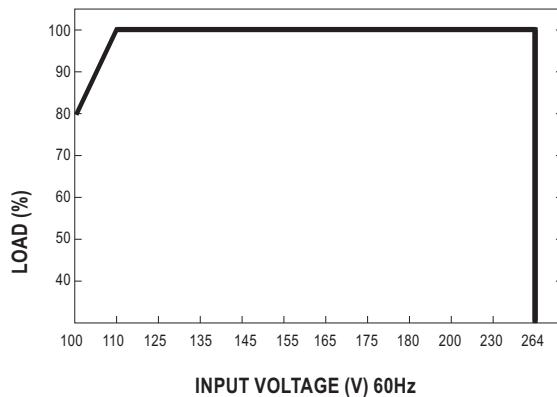
## ■ Block Diagram



## ■ Derating Curve

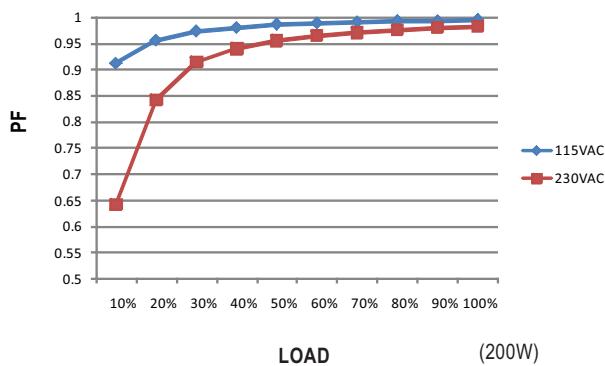


## ■ Static Characteristics



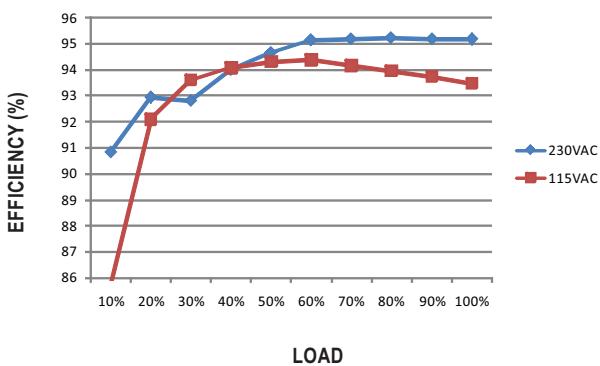
## ■ Power Factor Characteristic

## Constant Current Mode



## ■ EFFICIENCY vs LOAD (48V Model)

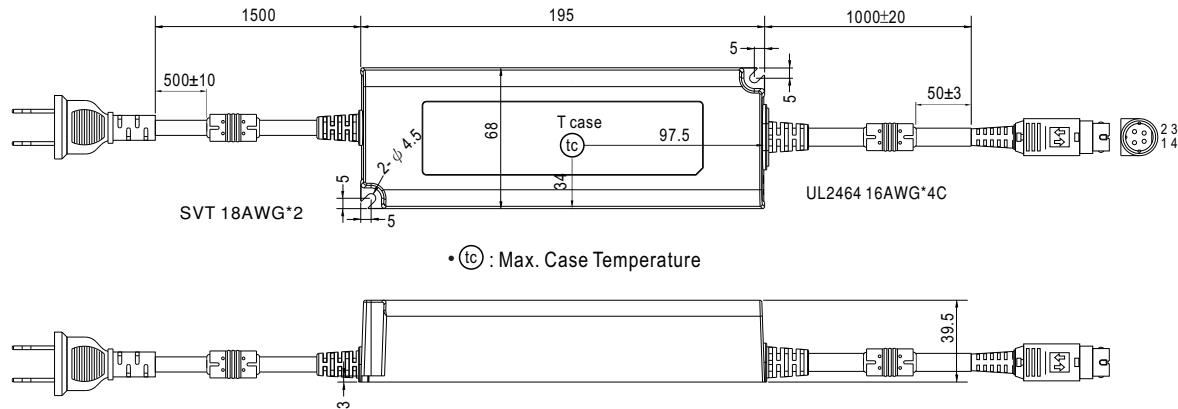
OWA-200 series possess superior working efficiency that up to 94% can be reached in field applications.



## ■ Mechanical Specification

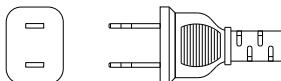
Case No. PWM-200

Unit:mm



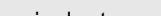
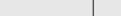
### ■ Input Plug Type

All models : NEMA 1-15p male plug



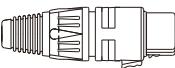
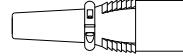
## ■ DC output plug

### ○ Standard plug:

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

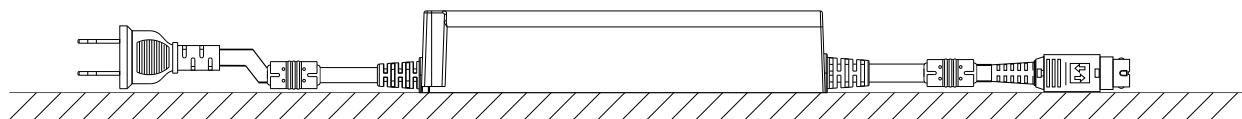
◎ Optional DC plug:

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		Output	Available for all model (Current rating: 15A max.)
		PIN No.	Output		
 FG not connected to output connector	C6P	1	+Vo	Available for all model (Current rating: 15A max.)	
		2	+Vo		
		3	+Vo		
		4	-Vo		
		5	-Vo		
		6	-Vo		

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

※ For details, please contact MEAN WELL.

### ■ Recommend Mounting Direction



### ■ Installation Manual

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