



## 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](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

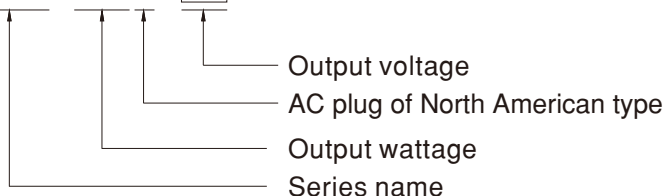
## Description

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		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>							

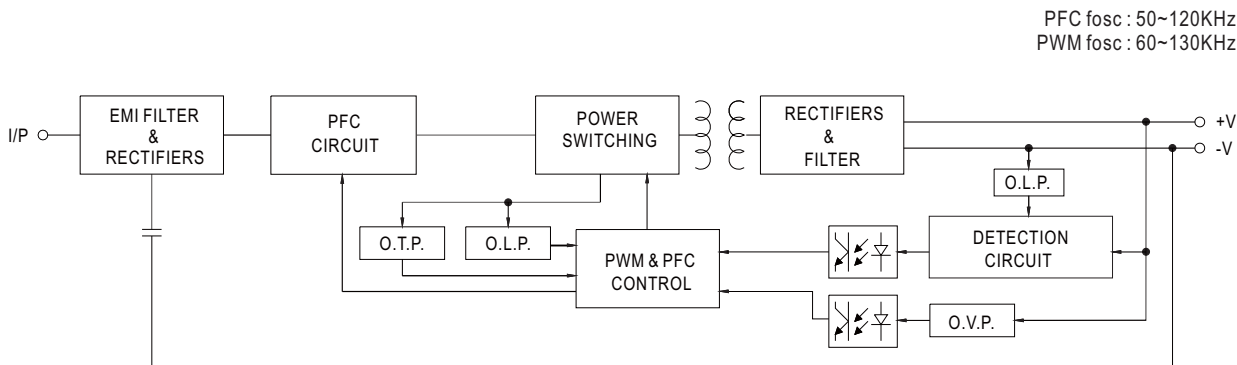




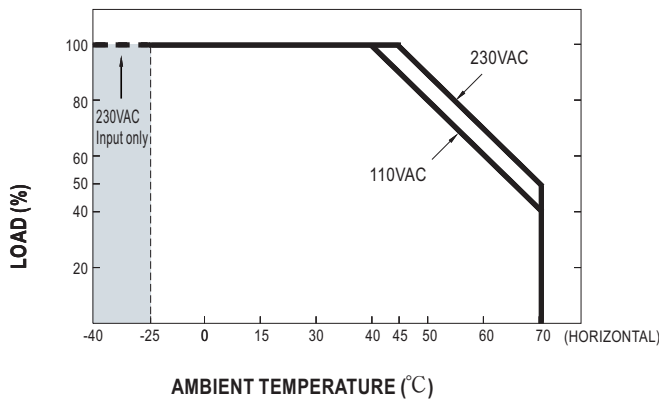
200W Single Output Moistureproof Adaptor

**OWA-200U** series

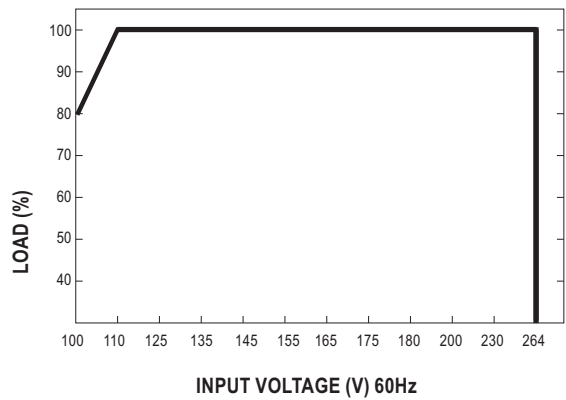
■ Block Diagram



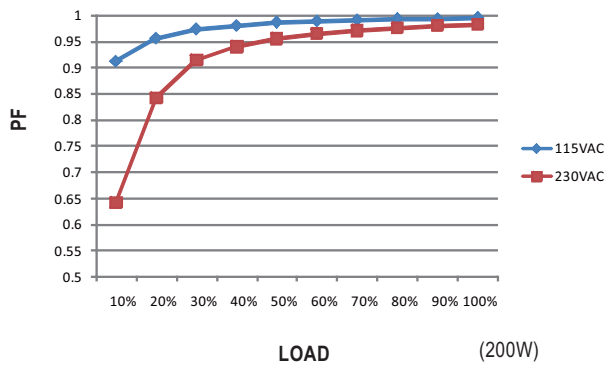
■ Derating Curve



■ Static Characteristics

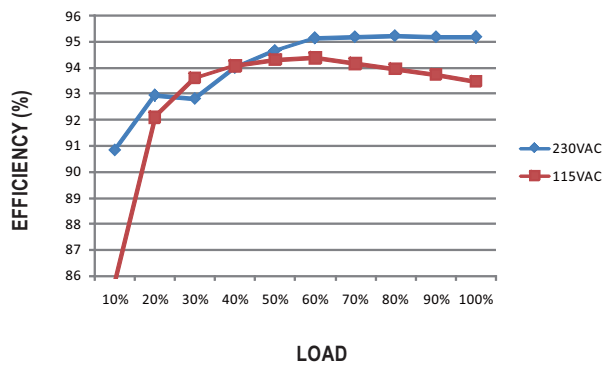


■ Power Factor Characteristic



■ EFFICIENCY vs LOAD (48V Model)

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

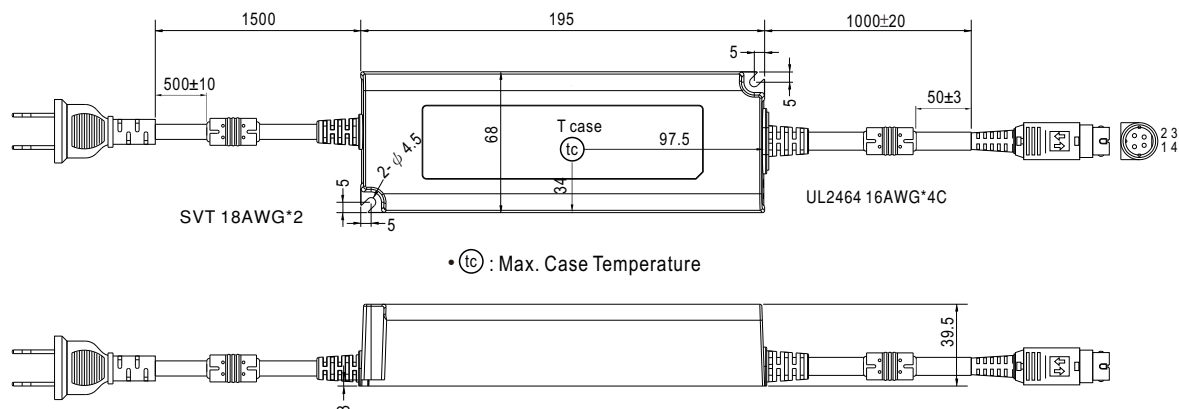




## Mechanical Specification

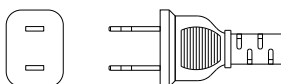
Case No. PWM-200

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:

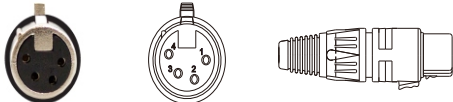


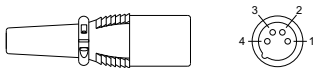
Tuning Fork Style	Type No.	A	B	C	Adaptation model
		OD	ID	L	
  (Straight)	P1J	5.5	2.1	11.0	Available for 36V/48V/54V (Current rating: 7.5A max.)
	P1M	5.5	2.5	11.0	
MOLEX 39-01-2060 (4.2mm) equivalent	Type No.	Pin Assignment		Available for all model (Current rating: 15A max.)	
		PIN No.	Output		
   FG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





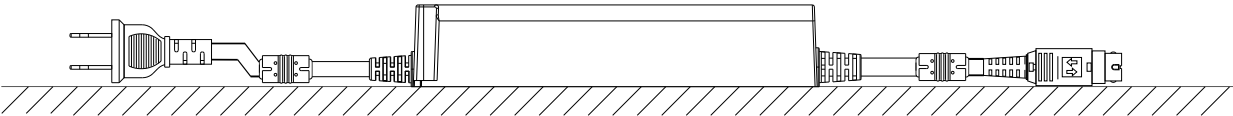
200W Single Output Moistureproof Adaptor

# OWA-200U series

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>