



Size: 2.20in x 1.89in x 1.13in (56mm x 48.1mm x 28.6mm)

FEATURES

- Wide Input Voltage Range of 90~264VAC
- USB Type C Charger
- RoHS Compliant
- Burn-In Tested
- Over Power, Over Current, Over Voltage, and Short Circuit Protection
- Meets FCC Part 15 Class B EMI Standard
- UL60950 Safety Approval

DESCRIPTION

The WMUSB30 series of AC/DC USB type C power supplies offers up to 30 watts of output power in a compact 2.20" x 1.89" x 1.13" package. This series consists of single output models with a wide input voltage range of 90~264VAC. Each model in this series has over power, over current, over voltage, and short circuit protection, is RoHS compliant, and has been burn-in tested. This series meets FCC part 15 class B EMI standards and has UL60950 safety approvals. Please contact factory for order details.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Voltage Range	Output Current		Ripple & Noise	Efficiency	Output Power
				Nominal Load	Max Load			
WMUSB30-5V	90~264VAC	5V	4.75~5.25V	3A	5A	150mV	74.37%	30W
WMUSB30-9V		9V	8.55~9.45V	2A	4A	250mV	80.29%	
WMUSB30-15V		15V	14.25~15.75V	2A	4A	250mV	83.49%	
WMUSB30-20V		20V	19~21V	1.5A	3A	250mV	83.49%	

SPECIFICATIONS

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
INPUT SPECIFICATIONS					
Input Voltage Range		90	100~240	264	VAC
Input Frequency			60/50		Hz
Input AC Current	@100-240VAC Input & Full Load			0.5	A
	@264VAC Input, Cold Start			40	A
Inrush Current	Output positive and negative between slow application of 0.4.75VDC through device's stable current			5	mA
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Voltage Range		See Table			
Line Regulation Rate	Max output current in input voltage range	-2		+2	%
Load Regulation	Rated input Load , other output for max output current load variation: min→max→min	-5		+5	%
No Load Power Consumption	115VAC/230VAC, No Load			0.3	W
Max Charger Load	Type-C Max Charge Current			2.4	A
Output Power		See Table			
Output Current		See Table			
Ripple & Noise ⁽¹⁾		See Table			
Dynamic Response Overshoot	25%~50%, 50~75%, load change, current change rate of 0.2A/us, cycle T1=T2=10mS, 50% duty cycle		±7		%Vout
Switch Machine Overshoot	Full Input Voltage, Rated Load			10	%
Common Mode Noise Test	Conforms to EN62684			2	V
Output Hold Time	115VAC/Specified Load	10			mS
Boot Delay	115VAC/Specified load			3	S
Output Rise Time	115/230VAC Input Voltage, Rated Load			50	mS
Fall Time	115/230VAC Input Voltage, Rated Load			100	mS
PROTECTION					
Short Circuit Protection ⁽²⁾	Input power shall decrease when output rain shorts, power supply should not damage, and should self-recover when fault condition is removed				
Over Current Protection	When output load current reaches or exceeds current protection point, charger will start over current protection			2.6	A
Over Voltage Protection	Output voltage clamped by internal protection circuit				
Over Power Protection				40	W

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SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature		0		+40	°C
Storage Temperature		-20		+80	°C
Operating Relative Humidity		10		90	%RH
Storage Relative Humidity	Non-Condensing @ Sea level (below 2,000m)	5		95	%RH
Vibration	10-300Hz sweep at a constant acceleration of 1.0G (Breadth: 3.5mm) for 1 hour for each perpendicular axes X,Y,Z				
Burn-In	Power supply should be burned-in for 4 hours under normal input and 80% rated load at 40°C±5°C				
GENERAL SPECIFICATIONS					
Efficiency		See Table			
Dielectric Strength (Hi-Pot)	Primary to Secondary	3000VAC/10mA Max/60 Second			
	Primary to Secondary	330VAC/5mA Max/3S			
Leakage Current	@264/50Hz			0.25	mA
Insulation Resistance	@Primary to Secondary, Add 500VDC Test Voltage	50			MΩ
Isolation Capacitance					
PHYSICAL SPECIFICATIONS					
Dimensions (L x W x H)		2.20in x 1.89in x 1.13in (56mm x 48.1mm x 28.6mm)			
SAFETY CHARACTERISTICS					
Safety Approvals ⁽⁴⁾	UL/FCC		UL60950		
EMI Standards	FCC Part 15		Class B		
EMS Standards ⁽³⁾	Electrostatic Discharge Requirement	Air Discharge: Test Level ±8kV Contact Discharge: Test Level ±4kV		Test Criteria B Test Criteria B	
	Radiated Electromagnetic Field Susceptibility	Test Level: 3V/m (r.m.s) Test Level: 80-1000Mhz, 80%AM (1KHz) sine-wave		Test Criteria A	
	Electric Fast Transient (Burst) Immunity Req.	AC Input Coupling: Test Level 0.5kV AC Input Coupling: Test Level 1KV		Test Criteria A Test Criteria B	
	Surge Capability Req.	Common Mode: N/A Differential Mode: 1kV		Test Criteria A	
	EN61000-4-6 Induced Radio Frequency Fields Conducted Disturbances Immunity Req.	Test Level: 3V Test Level: 0.15-80Mhz, 80%AM (1KHz)		Test Criteria A	

NOTES

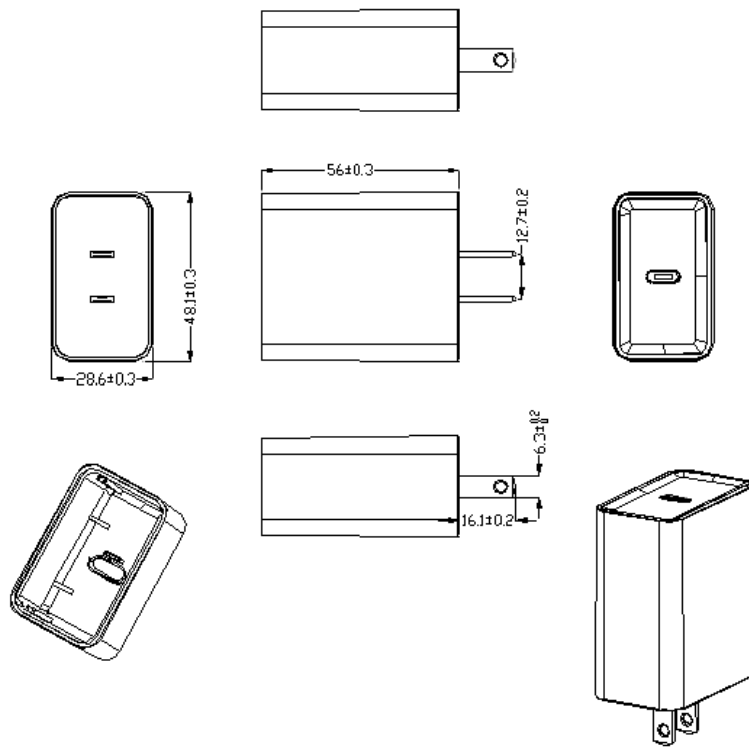
- Input AC 90/60Hz & 264VAC/50Hz, test the full current load conditions, output voltage of charger ripple with oscilloscope limit bandwidth of 20MHz, output increased 47uF electrolysis and 0.1uF ceramic capacitors.
- This product can be damaged under continuous short circuit operation. Short circuit may occur before or after power is turned on. When output short circuits, charger will enter short circuit protection mode. Short circuit when circuit enters into cycle by cycle mode.
- Assessment Criteria:

Acceptance Criteria	Performance
A	Agreed operational behavior within specified limits
B	Time limited functional diminishment or malfunction during tests is permitted. Function is self-reactivated by unit following completion of the tests.
C	Malfunction is permitted. Function can be reactivated either by reconnection to mains or by operator intervention.

- This product is Listed to applicable standards and requirements by UL.

**Due to advances in technology, specifications subject to change without notice.*

MECHANICAL DRAWINGS



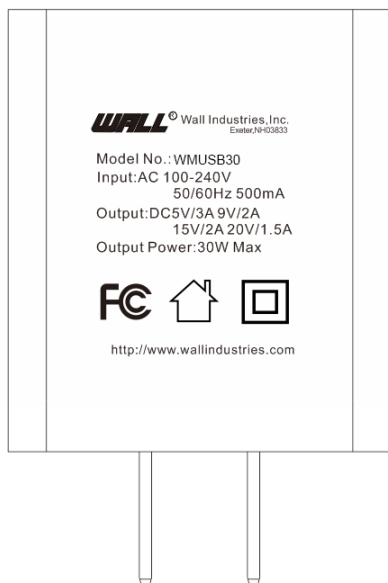
White Shell

PC Temperature: 120°C

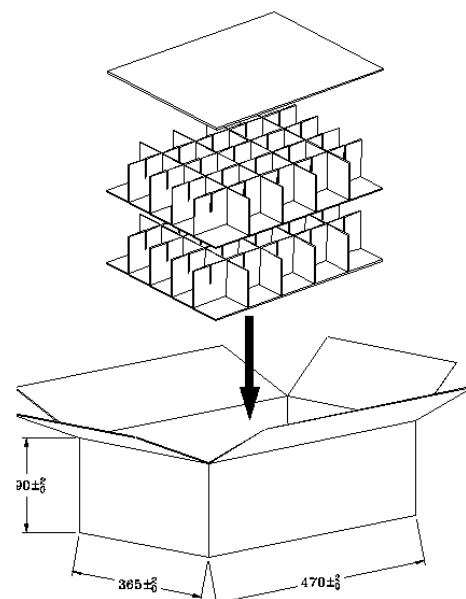
PC + ABS: 95°C

Note: PC Material meets ball pressure requirements

Label Drawing



Packing



COMPANY INFORMATION

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001: 2015 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

Contact **Wall Industries** for further information:

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