

■ **Features**

- Single output to 87W
- 110-240Vac Universal input
- Frequency: 50/60Hz
- OVP, OCP, OTP, and short circuit protection
- Efficiency: level VI
- QC3.0: Quick Charge 3<sup>rd</sup> edition
- PD3.0: Power Delivery 3<sup>rd</sup> edition
- USB-C output connector
- Compatible with Apple MacBook, iPad Pro, Samsung Galaxy Note 7, LG G5, Nexus 5X / 6P, Nokia N1 Tablet, Chromebook Pixel 2015 and other USB-C devices which request less than 87W.
- Flipping A/C input plug
- Dimensions: 120x83x31mm



\*Product images are for illustrative purposes only and may vary from actual design.

■ **Applications**

- Personal electronic devices

■ **Model List**

Model	Output Voltage	Output Current	Efficiency(typ.)	Power
WM087-PD3-A-IUSBC	5V	3A	81%	87W
	9V	3A	85%	87W
	12V	3A	86%	87W
	15V	3A	86%	87W
	19V	4.35A	86%	87W
	20V	4.35A	86%	87W

■ **Technical Data**

AC Input Voltage	110-240Vac
Ac Input Frequency	50/60Hz single phase
AC Input Current	1.5A max. @110Vac input 60Hz, with DC output full load
Standby wattage	< 0.21W @240Vac input and no-load condition
Inrush current	60A max. @cold start and 25°C, DC output full-loading and 240Vac input
QC3.0	5V/3A, 9V/3A, 12V/2.25A
Minimum load	Outputs will maintain regulation with no load
Hold-up Time	15mS min @ DC output full-loading and 230Vac Input
Ripple and Noise	≤200mV
Output Voltage Over-shoot	Over-shoot≤5% normal output voltage, no spikes more than 5% of the rated voltages will occur during turn on, turn off, power failure or recovery from a fault condition
Transient Response	+2-V outpus: on the +20V output from 0A to 1.5A, maximum voltage deviation is 5%
Short Circuit Protection	Auto recovery function

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■ **Technical Data(cont.)**

Over Voltage Protection	Auto recovery function, tripped voltage will be <24Vdc
Over Current Protection	Current limit: Iout*150% (max @main output stage)
Over Temperature Protection	The output power of the main supply decreases in a linear way when the temperature of case reaches 75°C
Turn on Time	AC to the DC outputs of the Adapter, within 3 seconds max at 25°C and line @230Vac
Rise Time	Rise time shall be less than 50mS, it should be measured from 110% to 90% of the output voltage
Temperature Coefficient	0.03/°C typical on output
Operation Temperature	0°C to 30°C
Storage Temperature	-20°C to 65°C
Operation Humidity	10% to 90%
Storage Humidity	10% to 90%
Altitude	From sea level to 2000m
Life	20000 hours@ DC output full-loading, AC 230Vac input & ambient temperature@25°C
MTBF	When the supply operation within any of the limits of the specification the MTBF shall be at least 40,000 hours at 25°C (MIL-STD-217F)
Dimensions	120x83x31mm
Weight	259.4g
Burn-In	The power supply will be performed a minimum for 4 hours Burn-In at 30°C under full load on all power supplies calculate MTBF
Temperature Rise	Less than 52°C @AC 230Vac input and DC output full load and Environment temperature 25°C
Vibration test	Nonoperation vibration with shipping container shall be 2G's Peak/7-50Hz, 4G's/50-500Hz, after test of abnormality to be found. Operation vibration shall be 0.5G's peak/10-60Hz, 3 Axes, after Test no abnormality to be noted
Drop Test	The product to be dropped from 1-meter height to a concrete floor no breakage then do the function test, it should be normal
Cable Flexing Test	The DC cord shall with weight of 200g, it swings at angle 60°, 2000cycle time min. Bending speed: 40 cycle per minute shall be no breakage to the code

NOTE: All specifications hold over full temperature range of 0 to 30°C unless otherwise noted.

Measured with a scope, DC-20 MHz bandwidth, differential mode, measured at the pins of the matching connector of which each output is decoupled by a high frequency 0.1uF cap and a 47uF electrolytic cap.

■ **Safeties**

Leakage Current	Less than 0.25mA at 240Vac, 50Hz
Hi-Pot Test	3000Vac, 5mA, 3Sec. between Primary to Secondary ground
Insulation	At DC 500Vdc, 3Sec. between Primary to Secondary circuit
Safety Standards	IEC/UL/EN60950/GB4943
EMC	GB9254/EN55022/FCC

Disclaimer:

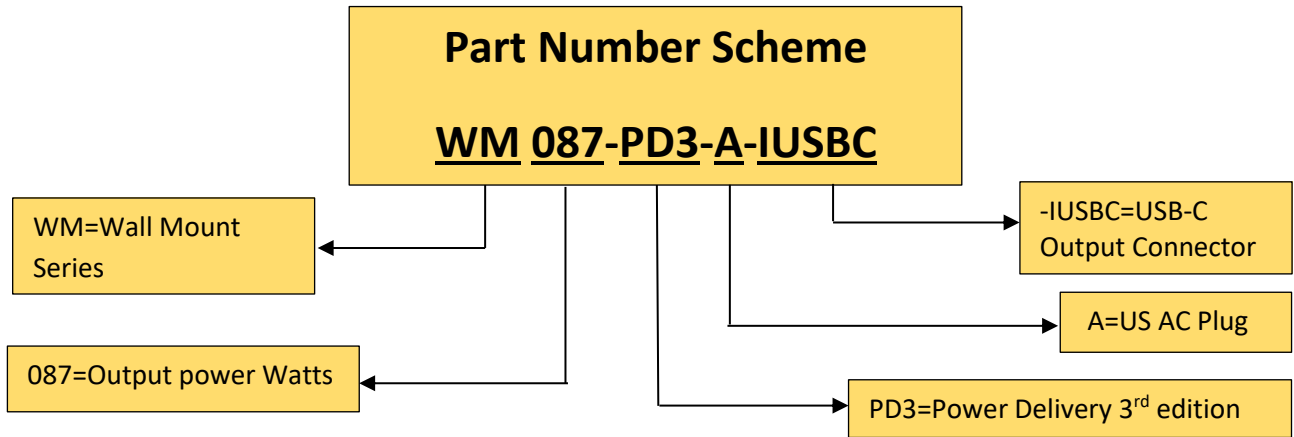
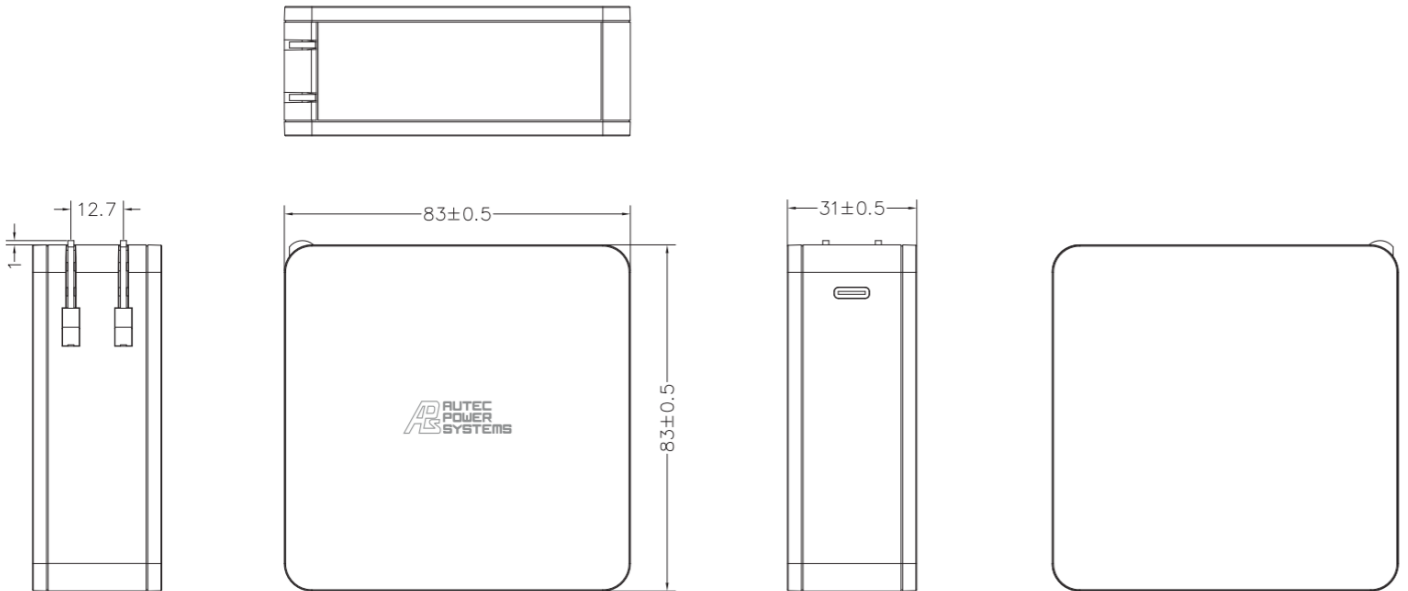
Autec Power Systems' (Autec) Power Supplies are Hi-Pot tested during the manufacturing process. Autec assumes no responsibility for secondary Hi-Pot testing at customer location or designated production line(s). Should customer require further Hi-Pot testing, at their own production line, following assembly of the Power Supply into the customer's assembled fixture, Autec requests advance notice. This request must be communicated to Autec in a timely manner and is recommended to be requested at time of issuing each purchase order.

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■ **Mechanical Diagram**



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**\*Specifications are subject to change without notice. Autec is not responsible for issues arising from errors or omissions.**