

RoHS
Compliant



Description

The Euro USB-C PD Mains Charger delivers up to 20W of power, featuring one USB-C port for fast and efficient charging. It supports a wide range of smartphones, tablets, and other USB-C devices, with output options of 5V @ 3A, 9V @ 2.22A, and 12V @ 1.67A. This compact charger ensures reliable power delivery for all your USB-C-powered gadgets.

Input Characteristics

Input Voltage

Rated Input Voltage : 100V AC to 240V AC
Input voltage range : 90V AC to 264V AC

Input Frequency

Frequency range : 47-63Hz
Rate Frequency : 50/60Hz

Input Current

0.6A max when input rated voltage and output rated load

Unload Standby Power

0.1W Max 115V/230V AC

In-Rush Current

50 A mps Max Cold start at 240Vac input, with rated load and 25°C ambient

AC Leakage Current

0.25mA Max. At 240V AC input

Output Characteristics

Method Of Measurement : Constant voltage
Rated Output Power : 20W

Combined Load/Line Regulation

Voltage	Min. Load	Max. Load	Load Regulation	Unload output voltage
+5V	0A	3A	4.75V - 5.25V	4.75V - 5.25V
+9V	0A	2.22A	8.55V - 9.45V	8.55V - 9.45V
+12V	0A	1.67A	11.4V - 12.6V	11.4V - 12.6V

Ripple And Noise

Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 47uF electrolysis capacitor. (test under the condition of rated input and rated output)

Voltage	Current	Ripple And Noise (Max)
+5V	3000mA	180m Vp-p
+9V	2220mA	180m Vp-p
+12V	1670mA	180m Vp-p

Efficiency

230V AC input, the average efficiency (5V, 3A) $\geq 81.39\%$ (9V, 2.22A) $\geq 85.47\%$ (12V, 1.67A) $\geq 85.48\%$ output rated load is 25%, 50%, 75%, 100% 4 situations of average efficiency

115V AC/230V AC input, the reference is (5V, 3A) $\geq 64.07\%$ (9V, 2.22A) $\geq 71.63\%$ (12V, 1.67A) $\geq 71.65\%$

Load Regulation

The rated output load is 20%-100%, the input voltage is 100V-240V AC, and the load adjustment within the load range is less than $\pm 5\%$.

Line Regulation

The line regulation of rated output voltage is less than $\pm 0.5\%$ while measuring at rated load and 100V ~ 240V of input voltage changing.

Capacitive Load Test

Input voltage 115V-230V AC, 80% load and parallel 1000uF capacitor output starts normally.

Output Transient Response

When the rated input voltage is 100V-240V AC, the output current changes at a slope of 0.5A/ μ s from 20% to 80% of the load and then back to 20% of the load and the dynamic change time is 10mS, the output voltage of the power supply should be kept in the range of 5V $\pm 10\%$.

Turn On Delay Time

3 second Max .At 100V AC input and output Max. Load

Hold Up Time

5ms Min.at100V AC input and output Max. Load.

Rise Time

100ms Max. At 100V AC input and output Max. Load, Output voltage 10%-90%

Overshoot

10% Max. When power supply on or turn off.

Heterophonic Noise

115V/230V AC input, In the standard silent room, make the product in working condition, put the sound level meter on the A-meter, test each side at 30cm of the front, back, left, right and upper sides of the product, take the maximum value, full voltage and full load range, less than 25dB

Protection Function

4.1 Short Circuit Protection

The Power Supply will be auto recovered when short circuit faults remove.

Over Current Protection

110-150% of rated current (input:110V-230Vac) When the overcurrent, the output will enter the hiccup mode, when the over-current situation is relieved, the product will automatically return to normal

Over Voltage Protection

The power supply will go into latch-off mode, and have to OFF and ON the AC input to restart the power supply.

Environmental Requirements

Operating Temperature	: 0°C to +40°C , Full Load, Normal Operation.
Relative Humidity	: 5%(0°C)~90%(40°C) 72h Full Load , Normal operating.
Storage Temperature	: With enclosure -20°C to+70°C
Storage Humidity	: With enclosure 20%°C to 80% °C
Altitude	: Sea level to 5000m
Class Of Protection	: IP20

Mechanical Characteristics

Dropping Testing

The Power Supply will be auto recovered when short circuit faults remove.

The product to be dropped from 1 meter height to a concrete floor no breakage.

Vibration : Operating: IEC 721-3-3 3M3 (5~9Hz,A=1.5mm; 9~200Hz, Acceleration 5m/s)

Transportation : IEC 721-3-2 2M2 (5~9Hz, A=3.5mm)

AXES,10 Cycles Per Axis: No permanent damage occur during testing, The product has to restore to its original situation after power off/on.

Safety Standard

Safety Accord with IEC62368-1, EN62368-1, GB4943 (Note: AC pins corresponding corresponding corresponding to national standards, such as the CE that corresponds to EN62368-1

Dielectric Strength Hi-Pot : Primary to secondary, 4000V DC (or 3000V AC) /5mA/3s.

Insulation Resistance : Primary to secondary :10MΩ Min at 500V DC

Reliability

115V-230V AC power adapter at 25°C environment and rated input and full load conditions, the average interval failure time of at least 30,000 h.(reference standard License :MIL-HDBK-217F)

Burn-In: 100% Bur-In with 100% loading & 40±5°C Environment temperature for 4 hours.

Operating Life: Power supply in rated conditions 100V-240V AC ambient temperature 25°C life time 3 years

EMC Standard

Electromagnetic compatibility emission	Test item	Standard	Performance Criterion
	Conducted emission	EN55032(CISPR32), GB/T 9254.1	Class B
	Radiated emission	EN55032(CISPR32), GB/T 9254.1	ClassB
	Harmonic current	EN61000-3-2, GB 17625.1	ClassA
	Voltage flicker	EN61000-3-3 GB 17625.2

Type C Charger

multicompPRO

Electromagnetic compatibility immunity EN55035(CISPR 35), GB/T 9254.2	Test item	Standard	Performance Criterion
	ESD	EN61000-4-2 GB /T 17626.2	8KV air, 4KV contact
	RF field susceptibility	EN61000-4-3 GB /T 17626.3	Level2, 3V/m
	EFT bursts	EN61000-4-4 GB /T 17626.4	Level2, 1KV
	Surge susceptibility	EN61000-4-5, GB /T 17626.5	Differential mode +/-1KV
	Conducted susceptibility	EN61000-4-6 GB /T 17626.6	Level 2, 3V
	Magnetic field immunity	EN61000-4-8 GB /T 17626.8	Level2, 1A/m
	Voltage dips, interruption		0%UT ; 0.5P, Criterion: B
		EN61000-4-11	70%UT; 25P/30P, Criterion: C
		GB /T 17626.11	0%UT; 250P/300P, Criterion: C

Green Requirements

Hazardous Substances

The components and used materials shall be in compliance with:

- Lead free process
- EU Directive 2015/863/EU "RoHS
- REACH MEET/ EU 2006/1907/EC

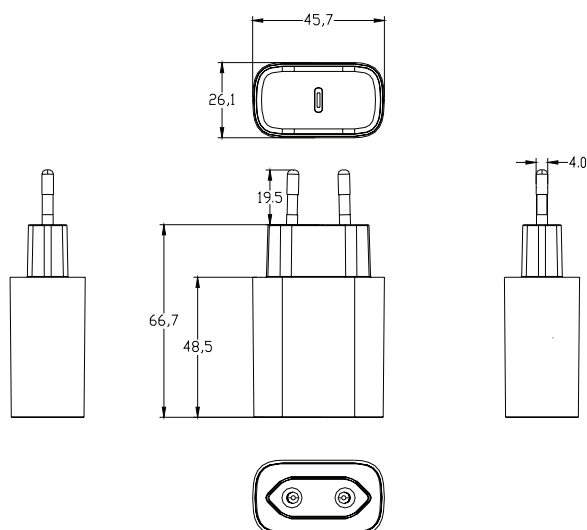
Form-In-Place

White glue

Weight

The weight of the power supply shall be 60g \pm 10g

Diagram



Dimensions : Millimetres

Part Number Table

Description	Part Number
Euro USB C PD Mains Charger, 1x USB C, 20W, Black	MP013763
Euro USB C PD Mains Charger, 1x USB C, 20W, White	MP013764

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