



# 45W USB 3.1 Type C Adapter

AQ45A/E-5CKA-H

- 5V/3A, 12V/3A, 20V/2.25A
- Type-C Reversible plug-in
- DoE 6, CoC V5 Tier 2
- Work with MacBook & Chromebook



Phihong 45W USB 3.1 Type-C Power Delivery (PD) adapter is an ideal charging solution for mobile devices. The 45W model adds 20V output voltage to the profile 3 and has 3 output voltages: 5V, 12V & 20V. It works with mobile devices following PD standards, including Chromebook and MacBook. Moreover, with the latest USB 3.1 Type-C receptacle, it allows the USB 3.1 cable either up or down orientation and reversible plug-in. It delivers both low no-load power consumption (<75mW) and high average efficiency (>88.85%) to meet DoE Level 6 and CoC V5 Tier 2 requirements.

## Features :

<b>Efficiency</b>	DoE Level VI and CoC V5 tier 2
<b>No Load Input Power</b>	≤75mW @ 230Vac
<b>Protection</b>	OVP, OCP, SCP, OTP
<b>Isolation</b>	3000Vac, Primary to secondary 10mA, 1 min
<b>Insulation Resistance</b>	>50MΩ @ 500Vdc, Primary to secondary
<b>OCP, SCP, OTP</b>	Auto recovery
<b>OCP</b>	Output current shall not exceed 4.5A@5&12V;3.5A@20V
<b>OVP</b>	<24V, shutdown mode
<b>Average Efficiency</b>	5V/3A: >81.84%; 12V/3A: >88.30%; 20V/2.25A: >88.85%
<b>Dimension</b>	US: 67 x 48 x 29 mm
<b>Weight</b>	145g
<b>AC Plug</b>	US

## Electrical Specifications :

<b>Input Voltage</b>	100~240Vac (90~264Vac min/max)
<b>Frequency</b>	50/60Hz Nom (47~63Hz min/max)
<b>Input Current</b>	1.0A (RMS) max @ 90Vac
<b>Output Voltage Range</b>	5V±5%; 12V±5%; 20V±5%
<b>Output Current Range</b>	5V/12V mode: 0~3A; 20V: 0~2.25A
<b>Maximum Output Power</b>	45W
<b>Output Ripple &amp; Noise</b>	200mV pk-pk @ max load
<b>Earth Leakage Current</b>	0.25mA max.
<b>AC Inrush Current</b>	90A max @ 240Vac

## Environmental Specifications :

<b>Operating Temperature</b>	0°C ~ +45°C
<b>Storage Temperature</b>	-40°C ~ +85°C
<b>Humidity, Operation</b>	90% RH Max
<b>Humidity, Storage</b>	90% RH Max
<b>E-cap Life time</b>	>2year @ 25°C, Full load.
<b>Altitude</b>	5000M
<b>MTBF (MIL-HDBK-217F)</b>	>50K hours @ 240Vac

## Safety and Compliance :

IEC 60950-1: 2005 + A1 + A2
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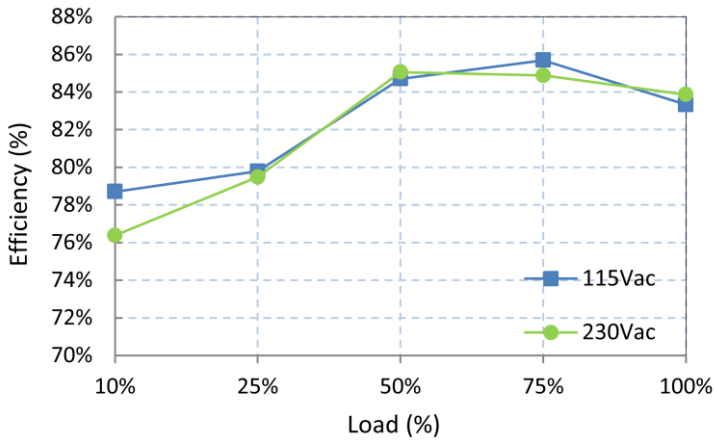
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● 5V/3A, 12V/3A, 20V/2.25A ● Type-C Reversible plug-in ● DoE 6, CoC V5 Tier 2

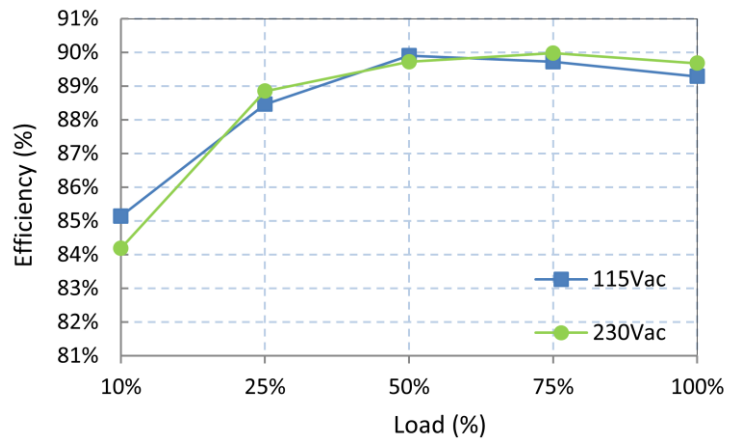
● Work with MacBook & Chromebook



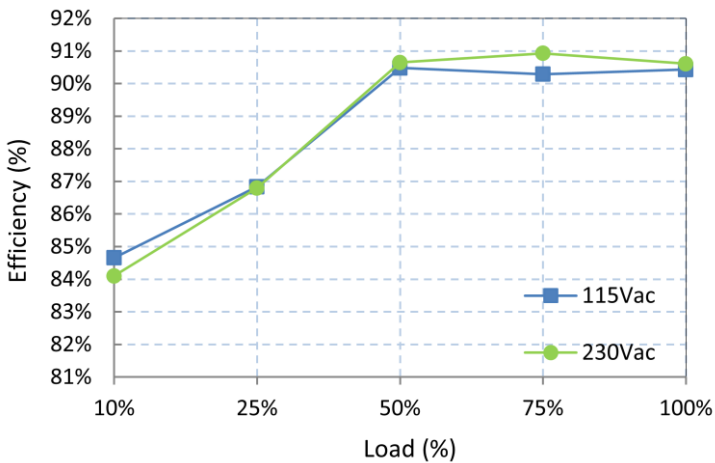
### Efficiency (5V/3A)



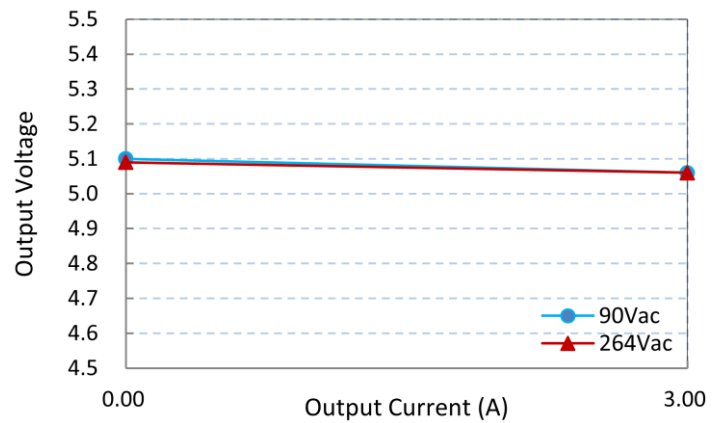
### Efficiency (12V/3A)



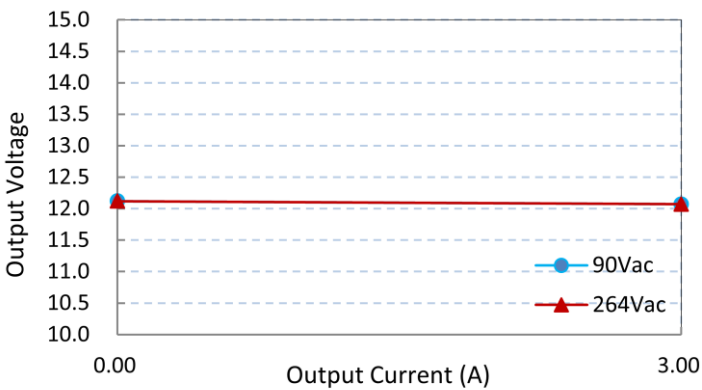
### Efficiency (20V/2.25A)



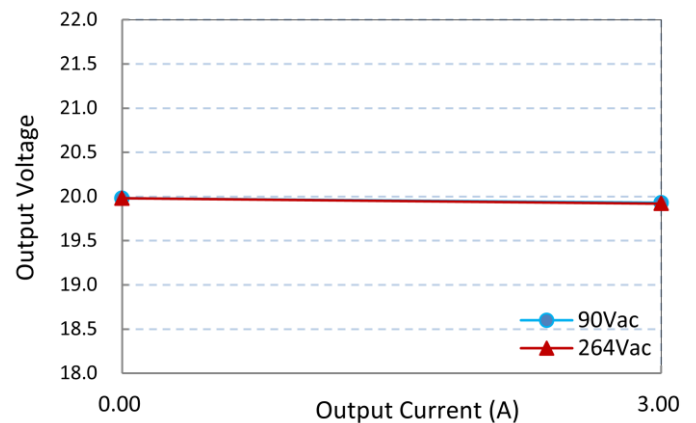
### Load Regulation (5V/3A)



### Load Regulation (12V/3A)



### Load Regulation (20V/2.25A)





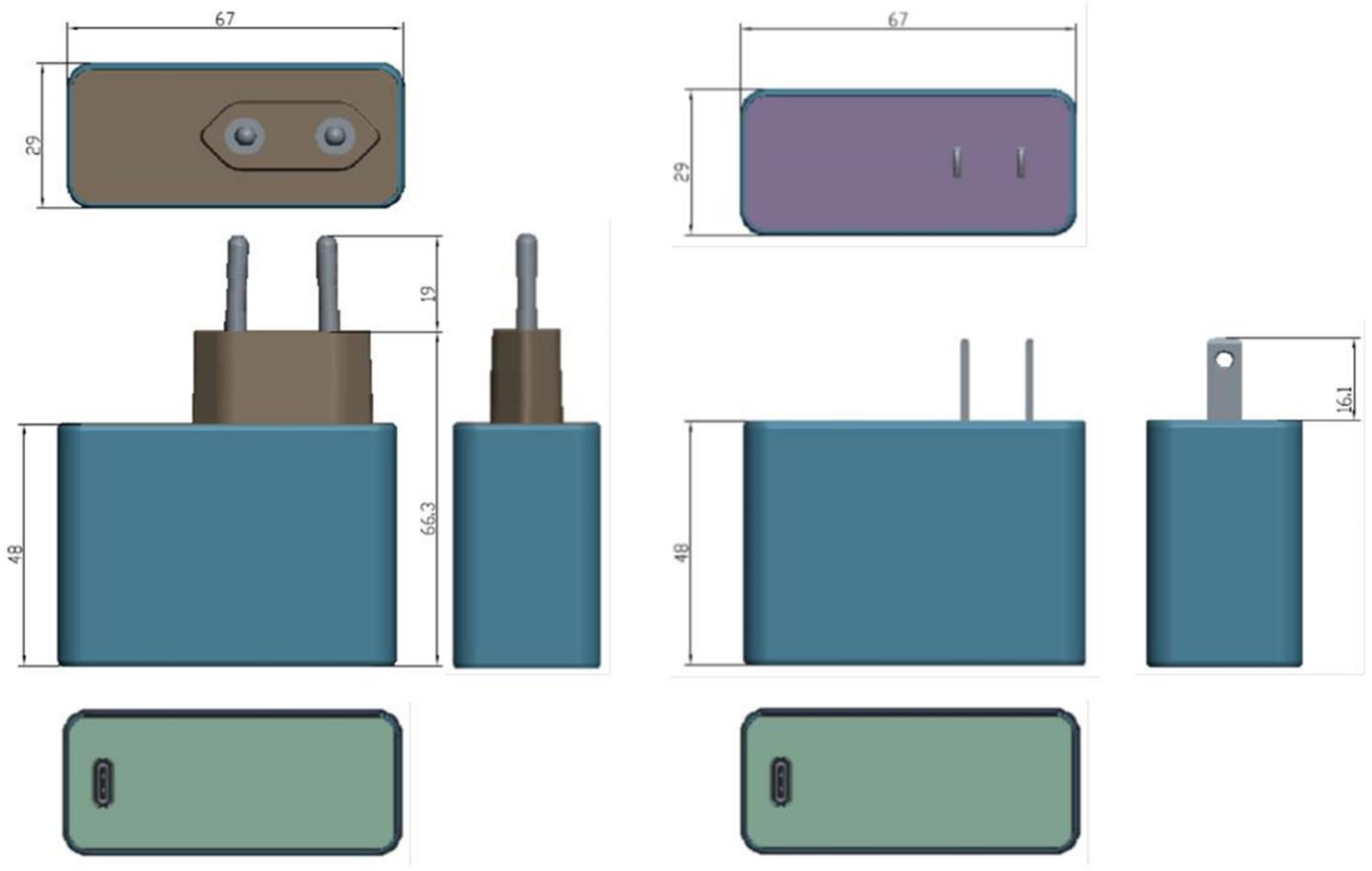
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## Dimensions: mm



## Model Selections

Model Number	Plug Type	Case Color	Output Voltage (Vdc)	Output Current (A ±5%)	Max. Output Power (W)
AQ45A-5CKA-H	US	Black	5/12/20	3/3/2.25	45
AQ45E-5CKA-H	EU	Black	5/12/20	3/3/2.25	45

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