

TECHNICAL DATA SHEET

EW-35 Powerbank

1. Description

Application Scope

This product is a fast-charging intelligent portable power bank with wireless charging function. It has a built-in certified constant voltage and constant current fast charging/discharging chip, integrating QC, AFC, FCP, PE, PD protocols, compatible with USB BC1.2 charging standard, as well as proprietary protocols of brands such as Apple and Samsung. It supports a maximum wired output of 20W and a maximum wireless charging output of 10W, and can be universally used for fast charging of mobile phones and portable digital electronic products.

Definition of Output Functions

Power On

In standby mode, short press the power button or directly connect a load to display the current battery level percentage and turn on the output. If there is no load for approximately 35 seconds, the nixie tube turns off and the product enters low-power standby mode.

Charging

For Micro/Type-C input: The nixie tube displays 188% and the green lightning icon light up briefly, then the units digit of the current battery level flashes. When the input is fast charging, the green lightning icon lights up, supporting a maximum input of 20W. When fully charged: 100% remains on steadily.

Discharging

When a load is connected to the USB-A interface: The power bank automatically turns on the output. The maximum single-port load power is 18W (5V/3A, 9V/2A, 12V/1.5A). The green lightning icon lights up to indicate fast charging

When a load is connected to the Type-C interface: The power bank automatically turns on the output. The maximum single-port load power is 20W (5V/2.4A, 9V/2.22A, 12V/1.67A). The green lightning icon lights up to indicate fast charging output (9V or 12V). For wireless charging output: Single press the button to activate the wireless charging stand by mode. Place a Qi-enabled wireless charging mobile phone at the center of the cross mark on the fabric surface to start wireless charging. The green lightning icon lights up to indicate the 7.5W/10W working state. When two loads work simultaneously: The output will switch to 5V with a maximum output of 5V/3A, and the wireless charging will also reduce to 5W. When only one output port has a load, if the load supports fast charging, the product will automatically resume fast charging with a maximum output power of 20W, and the corresponding fast-charging green lightning icon will light up.

Discharging battery level indication:

The remaining battery level percentage remains on steadily; the green lightning icon lights up in fast charging state.

Power Off

Double press the button to turn off the output.

2. Technical Data

Product Parameters

Input: Micro 5V/2A 9V/2A 12V/1.5A
 Input Type-C: 5V/2.4A 9V/2.22A 12V/1.67A
 Output Type-C: 5V/2.4A 9V/2.22A 12V/1.67A
 Output USB-A: 5V/3A 9V/2A 12V/1.5A
 Wireless TX: 5W/7.5W/10W
 Multiple ports charging simultaneous output (Max): 5V/3A
 Max Output: 20W
 Charging Time: 3H-3.5H
 Capacity: 10000mAh/3.7V
 Net Weight: 210g

Indication Status

Charging, Battery level: 0%-99%
 Indicator Status: The units digit of the current battery level flashes

Charging, Battery level: 100%
 Indicator Status: Steady on

Discharging: 100%-1%
 Indicator Status: Current battery level remains on steadily

Discharging <1%
 Indicator Status: Flashing (low battery reminder)

Discharging <0%
 Indicator Status: Off

Operation Instructions

Power On
 Single press the button or directly connect a load to activate the system. The battery level indicator turns on simultaneously, and the portable power bank can discharge externally.

Power Off

In the power-on state, short press the power button twice to turn off the output and enter hibernation.

Automatic Hibernation

In standby mode, short press the power button to turn on the battery level display. If no load is connected within 35 seconds, the product enters hibernation.

Safety Protection

System-level Voltage/Current Protection
 Overcharge voltage protection and undercharge voltage protection: When the charging voltage of the portable power bank exceeds or is lower than a certain threshold, EW35 stops charging the battery to ensure the entire system is not affected by abnormal voltage, and automatically resumes charging when the charging voltage returns to the normal range.
 Under-discharge voltage protection: When the battery voltage is lower than the under voltage protection value, EW35 turns off the output to prevent over-discharging of the battery.
 Output over current and short-circuit protection: Enters shutdown protection state when discharging over current or short-circuit occurs.
 Battery temperature protection: Turns off the output when the battery temperature is higher than the charging/discharging protection temperature, and resumes until the temperature drops below the temperature protection recovery threshold.

Hardware-only Protection

EW35 has independent, hardware-only protection for the battery, providing safer and more reliable protection against abnormal conditions such as overcharging, over discharging, overcurrent and short circuit of the battery.

Operating temperature: -10 ~ +40°C

Storage temperature: -20 ~ +45°C

Relative humidity: 40% ~ 80%

Atmospheric pressure: 86 ~ 106Kpa

Heat dissipation method:

Natural ventilation

Safety:

Designed to comply with CE safety requirements

Electromagnetic Compatibility:

Designed to comply with FCC, EMC requirements.

Environmental Protection:

Complies with

Do not immerse the product in water or other liquids to prevent water ingress;

Do not touch the AC adapter with wet hands; ensure the adapter is safe and intact;

Do not allow dust to accumulate on the product or the AC adapter;

Do not use the product in environments where the temperature is outside the range of -20°C and +60°C;

4. Producer**Manufacturer:**

SHENZHEN ELOOP TECHNOLOGY CO.,LTD

Address :

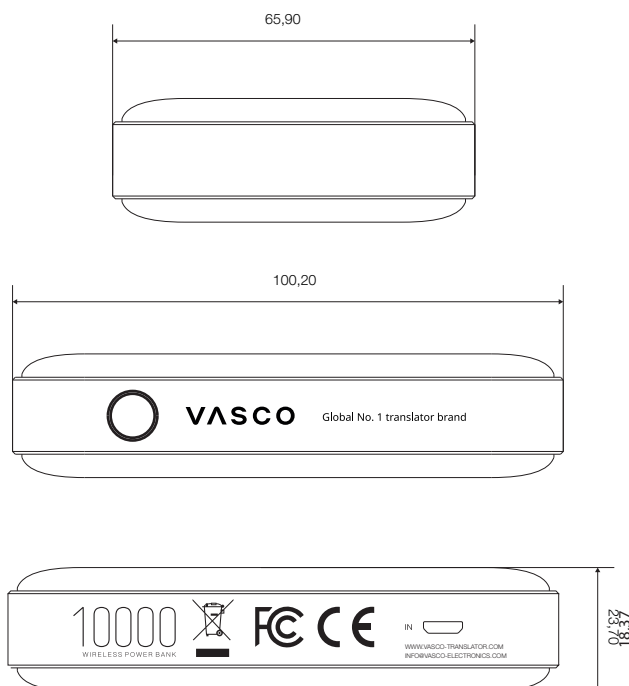
7F,Building E, Ming Jinhai Industrial Area, Gushu, Xixiang Town, Bao'an District,

Importer:

Vasco Electronics S.A.

Al. 29-Listopada,

31-401 Krakow, Poland

3. Dimensions**5. Notes**

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TECHNICAL DATA SHEET

Vasco accesories organiser

1. Description

Accessories for chargers and cables.

Material: Polyester

4. Producer

Producer:
Vasco Electronics S.A.
Al.29 Listopada 20,
31-401 Krakow, Polska

2. Dimensions

Dimensions:
240 mm x 180 mm

5. Notes

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3. Technical Data



Machine wash at or below 30°C (86°F)



Do not use bleach.



Do not tumble dry.



Do not iron.

TECHNICAL DATA SHEET

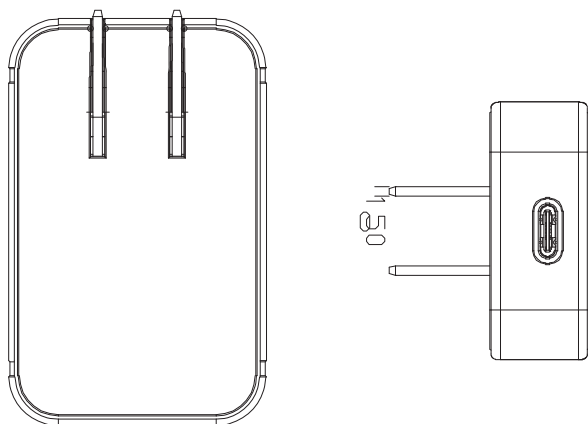
USB-C US Charger

1. Description

Name: PD Adapter
Model: PD-122 (A+C 48W)
AC input voltage: 100-240 VAC, 50/60 Hz
DC output voltages: 5 V, 9 V, 12 V with at least 20 W of power for 9 V and 12 V configurations
Minimum efficiency of 80% at full load (tested 90,33%). Overcurrent (max ~15%) (Tested~28%), short circuit, over voltage, over temperature protection. Touch temperature less than 55°C when charging at 20 W at 25°C room temperature.
Product weight: 48 g ($\pm$ 1g)

2. Dimensions

Product Dimensions:
Folded US Standard (Neutral):
41.45 x 65.30 x 16.00 mm ($\pm$ 0.5)



3. Producer

Vasco Electronics S.A.
Al. 29-Listopada,
31-401 Krakow, Poland

4. Notes

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TECHNICAL DATA SHEET

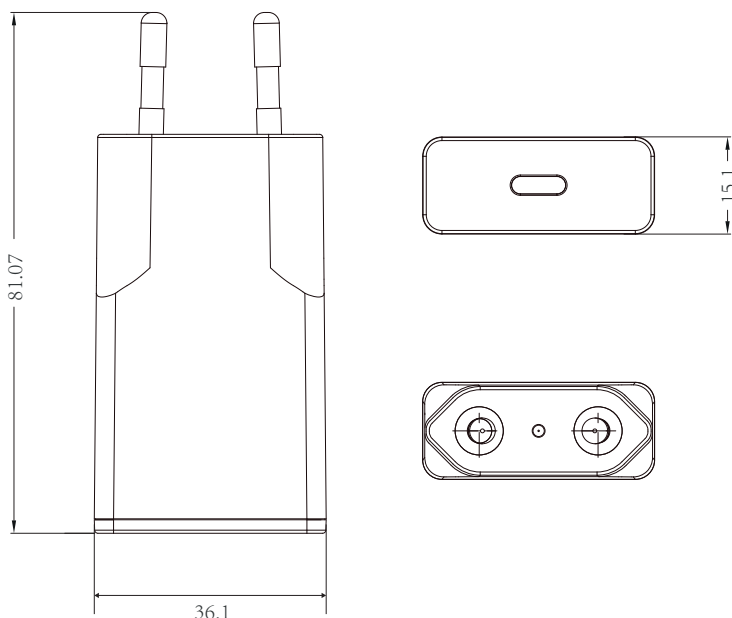
USB-C EU Charger

1. Description

Name: VASCO 20W PD Adapter
Model: PD-524B
AC input voltage: 100-240 VAC, ~50/60 Hz 0.6A
Output: 5.0V $\Rightarrow$ 3.0A or 9.0V $\Rightarrow$ 2.22A
or 12.0V $\Rightarrow$ 1.67A
Total Output: 20W Max SN: 2025080001
Vasco Electronics S.A., Al.29 Listopada 20,
31-401 Kraków, Poland
Support: info@vasco-electronics.com
Made in China, Vina International Holdings LTD
Product weight: 37.75 ($\pm$ 1g)

2. Dimensions

Product Dimensions:
EU Standard (Neutral):
36.1 x 81.07 x 15.10 mm ($\pm$ 0.5)



3. Producer

Vasco Electronics S.A.
Al. 29-Listopada,
31-401 Krakow, Poland

4. Notes

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TECHNICAL DATA SHEET

PD-122 Adapter

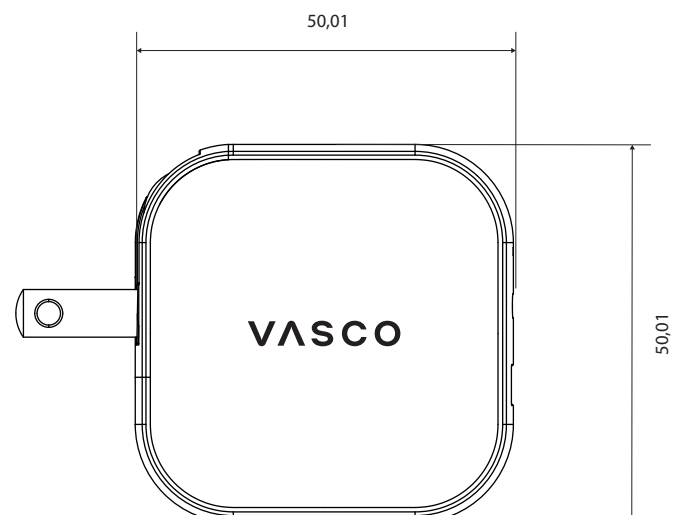
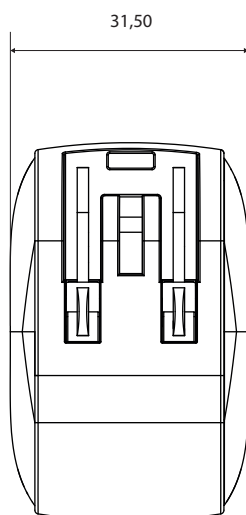
1. Description

Model: PD-122 (A+C 48W)
Input: 100-240Vac 50/60HZ, 1.5A MAX USB-C1
Output: 3.3-11V/3A ;
5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/2.25A;
USB-A Output : 5V/3A , 9V2A, 12V1.5A;
USB-C1+USB-A:
Outpt: C1: 5V/3A, 9V/3A, 12V/2.25A, 15V/2A, 20V/1.5A
(30W)+A : 5V/3A, 9V/2A, 12V/1.5A(18W) ;
Total Output Power: 48W MAX ;
Material: PC plastic, V- Fire resistance level
Operation temperature : -10°C ~ +35°C
Storage temperature : -20°C ~ +80°C
Socket specifications:
Folding: US Standard
Fixed: European Standard

2. Dimensions

Product Dimensions:
Folded US Standard (Neutral):
50.01 x 50.01 x 31.5 mm (±0.5)

Product Weight:
125 g (±10g)



3. Technical Data

Electrical Performance Parameters/
Product Electrical Specifications:

Testing in Ambient Temperature
AC SOURCE, Chroma Model: 6408, :WT310E;
Testing conditions: Input: AC SOURCE,
Chroma Model: 6408 for voltage adjustment,
Power Meter: WT310E.

PD, +60CMUSB: Chroma Model: 63102 ;
Output: 30CM Type-C Cable + PD Voltage
Regulator, +60CM USB Load Cable; Load
Meter: Chroma Model: 63102.

RIGOL Model: DS1102E; FLUKE Model: 15B+
Oscilloscope: RIGOL Model: DS1102E;
Voltage and Current Meter: FLUKE Model:
15B+

Electrical Parameters and Safety/Protection Features				
Input Characteristics:	Item	Min.	Normal	Max
	Input Voltage: Vac	100~240		
	Input Frequency: Hz	50~60		
	Input Current: A	1.5A MAX		
	Standby Power Consumption (mW)		200 mW	
Output Characteristics:	Power Efficiency (%)		> 85%	

Output characteristic:	USB-C1/C2 (W) USB-C Output power:	PD3.0:	Specifications 45W
	5V/3A; 9V/3A; 12V/3A; 15V/3A; 20V/2.25A		
	USB-C1+C2 (W) USB-C1+A Output power:	C1: PD3.0:	Specifications 48W
	5V/3A; 9V/3A; 12V/2.5A; 15V/2A; 20V/1.5A+ A: QC3.0: 5V/3A; 9V/2A; 12V/1.5A		
	The broadcast power of PDO and the rated power have slight differences. In order to balance certification and compatibility requirements, the load aging test should be conducted based on the rated power		
	65W 100~240VAC Rated Power: 65W. It should operate normally within the voltage range of 100-240VAC		
	Ripple and Noise (mVp-p)	< 200mV	
	At the output terminal, connect an oscilloscope in parallel with a 10uF and 0.1uF capacitor. The ripple should not exceed 120mV within the rated load range		

Safety/Protection Features	Short Circuit Protection	1.Whole System Short Circuit Proection 2.Individual Port Short Circuit Protection		Burst Mode
	Short Circuit Protection: When a short circuit is detected at the output, the output should be shut off, and once the short circuit is removed, the output should return to normal. The product should not be damaged.			
	Overcurrent Protection	1.Whole System Overcurrent Protection	Within the rated power of 100% to 150%	Burst Mode
	When the load exceeds 100% to 150% of the rated power or reaches the set overcurrent threshold, the output should be shut off. Once the load is reduced or removed, the output should be restored.			
	Leakage Current	<0.25 mA		
	Dielectric Strength Test: 3000V/2S 5mA			

Safety/Protection Features	Operating Environment Temperature	-10°C~ 35°C
	Storage Temperature	-20°C~ 80°C
	Operating Humidity	-5%~ 90%
POWER-Z KT002: KT002 V1.00.61 Charging Protocol and Intelligent Recognition, the following data is from POWER-Z KT002 firmware version: KT002 V1.00.61		
Type-C	PD3.0,PPS,Apple2.4A ,QC3.0,QC2.0,Samsung AFC,Huawei FCP,Huawei SCP, MTK PE+	

Sample Testing Records

Testing Conditions: Input: AC SOURCE, Chroma Model: 6408 for voltage adjustment, Power Meter: RekRK9813N;

Output: 30CM Type-C cable + PD voltage regulator, +60CM USB load cable; Load Meter: Chroma Model: 63102;

Oscilloscope: RIGOL Model: DS1102E; Voltage and Current Meter: FLUKE Model: 15B+ 15B+

The following data is for reference only. Slight variations may occur in mass-produced models; an error margin of within 5% is considered normal.

USB-C1/C2 48W				
	Test item	Nominal/ Standard	Input voltage AC (V)	
			115	230
1	no-load input current (mA)	NO LOAD	4.72	7.32
2	stand-by power consumption (W) required < 0.3W	NO LOAD	0.121	0.155
3	no-load output volage (V)	5 V	5.07	5.07
		9 V	9.14	9.14
		12 V	12.22	12.22
		15 V	15.26	15.26
		20V	20.36	20.36
4	Full load input current (A)	5V/3A	0.360	0.180
		9V/3A	0.499	0.295
		12V/3A	0.639	0.378
		15V/2.67A	0.697	0.412
		20V/2A	0.682	0.402
5	Full load input power (W)	5V/3A	17.95	18.05
		9V/3A	31.17	31.19
		12V/3A	40.96	40.98
		15V/2.67A	44.95	45.04
		20V/2A	43.91	43.77
6	Full load total output power (W)	5V/3A	15.15	15.15
		9V/3A	27.33	27.33
		12V/3A	36.48	36.48
		15V/2.67A	40.66	40.66
		20V/2A	40.16	40.16
7	Transfer efficiency (%)	5V/3A	84.40%	83.93%
		9V/3A	87.68%	87.62%
		12V/3A	89.06%	89.02%
		15V/2.67A	90.45%	90.27%
		20V/2A	91.46%	91.75%
8	100% load output voltage (V)	5V/3A	5.05	5.05
		9V/3A	9.11	9.11
		12V/3A	12.16	12.16
		15V/2.67A	15.23	15.23
		20V/2A	20.08	20.08
9	output ripple (mVp-p) (100% load)	5V/3A	64	64
		9V/3A	86	86
		12V/3A	72	72
		15V/2.67A	56	56
		20V/2A	80	80

10	output overcurrent protection	5V/3A	3.64	3.64
		9V/3A	3.73	3.73
		12V/3A	3.73	3.73
		15V/2.67A	3.27	3.27
		20V/2A	2.63	2.63

USB-A 18W				
Number	Test Item	Nominal Standard	Input Voltage AC(V)	
			115	230
1	no-load input current (mA)	NO LOAD	4.72	7.32
2	stand-by power consumption (W)	NO LOAD	0.121	0.155
3	no-load output voltage (V)	5V	5.15	5.15
		9V	9.24	9.24
		12V	12.29	12.29
4	full load input current (A)	5V/3A	0.361	0.182
		9V/2A	0.344	0.201
		12V/1.5A	0.341	0.199
5	full load input power (W)	5V/3A	17.74	18.06
		9V/2A	21.67	22.02
		12V/1.5A	21.88	22.10
6	full load total output power (W)	5V/3A	15.03	15.03
		9V/2A	18.28	18.28
		12V/1.5A	18.33	18.33
7	Transfer efficiency (%)	5V/3A	84.72%	83.22%
		9V/2A	84.35%	83.02%
		12V/1.5A	83.77%	82.94%
8	100% load output voltage (V)			

9	output ripple (mVp-p) (100% load)	5V/3A	60	60
		9V/2A	80	80
		12V/1.5A	90	90
10	output overcurrent protection	5V/3A	3.54	3.54
		9V/2A	2.61	2.61
		12V/1.5A	1.82	1.82

USB-C1+USB-A 48W				
Number	Test Item	Nominal Standard	Input Voltage AC(V)	
			115	230
1	Full load input current (A)	USB-C1:20V/1.5A	0.803	0.475
		USB-A:12V/1.5A		
		USB-C1:15V/2A	0.811	0.480
		USB-A:9V/2A		
2	Full load input current (A)	USB-C1:20V/1.5A	53.34	53.19
		USB-A:12V/1.5A		
		USB-C1:15V/2A	53.67	53.64
		USB-A:9V/2A		
3	Full load input current (A)	USB-C1:20V/1.5A	48.36	48.36
		USB-A:12V/1.5A		
		USB-C1:15V/2A	48.24	48.24
		USB-A:9V/2A		
4	Full load input current (A)	USB-C1:20V/1.5A	90.66%	90.91%
		USB-A:12V/1.5A		
		USB-C1:15V/2A	89.88%	89.93%
		USB-A:9V/2A		
5	Full load input current (A)	USB-C1:20V/1.5A	20.15	20.15
		USB-A:12V/1.5A	12.09	12.09
		USB-C1:15V/2A	15.09	15.09
		USB-A:9V/2A	9.03	9.03
6	Full load input current (A)	USB-C1:20V/1.5A	2.0	2.0
		USB-A:12V/1.5A	2.0	2.0
		USB-C1:15V/2A	2.61	2.61
		USB-A:9V/2A	2.61	2.61

Other tests		
Test item	Nominal standard	
High voltage test 3000Vac 60S <5mA	Input to Output	OK
Full load aging 4 hours/		Test passed or Test Qualified
Test item	Parametr Specification	Test Results
AC Plug Swivel	Switch Angle 0-90°, 5000 Cycles	OK
USB Port Insertion and Removal Test	Vertical Insertion and Removal 3000 Times	OK
USB 12H Salt Spray Test for USB Ports	12H Salt Spray	OK
Product Drop Test	One Edge Three Sides Six Faces, Drop Height 70CM	OK
264V Switch Impulse Test	Full Load On for 10 Seconds, Off for 10 Seconds, Continuous for 2 Hours	OK
Remarks:		
Wall-mounted drop height: 1000mm; Desktop drop height: 700mm; The testing surface is a 13mm thick plywood board, 19-20mm above the ground.		

4. Producer

Manufacturer:

Vina International Holdings LTD :
 101-2,201-2, D building, No.26, East Chang Long
 RD, FuchengAo,
 Pinghu Town, Longgang District, Shenzhen, China

Importer:

Vasco Electronics S.A.
 Al. 29-Listopada,
 31-401 Krakow, Poland

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