ECPD-45 SERIES

GaN PD Charger (USB Type-C)

Part of the tti Family of Specialists



Features

- USB Power Delivery Function
- Gallium Nitride Based Design
- Protections:
  Short circuit / Over voltage / Over current
  Over temperature (optional)
- Energy Efficiency Level VI
- No Load Power Consumption ≤ 0.3W (VI)
- MTBF > 100,000 hours
- P.D. 3.0 / QC 4.0+ / QC 4.0
- Customized Solutions Available

The ECPD-45 is a compact 45W GaN USB-C Power Delivery charger designed to deliver fast, efficient charging for smartphones, tablets, laptops, and other USB-powered devices. Featuring advanced GaN technology, it offers high power output in a smaller, lightweight form factor with interchangeable AC plug options for international use.

Built-in protection against over-current, over-voltage, short circuits, and overheating ensures safe and reliable operation, making it an ideal charging solution for both home and travel.

OUTPUT

MODEL No.	MAX. OUTPUT POWER (W)	OUTPUT INTERFACE		OUTPUT VOLTAGE (Vo)	MIN. LOAD(Io)	MAX. LOAD(Io)	LOAD REGULATION	LINE REGULATION	RIPPLE & NOISE
ECPD-45	45W	USB-C		5V	0A	3A	± 5%	± 1%	180mV
				9V	0A	3A	± 5%	± 1%	180mV
				12V	0A	3A	± 5%	± 1%	240mV
				15V	0A	3A	± 5%	± 1%	240mV
				20V	0A	2.25A	± 5%	± 1%	240mV
	18W	USB-A		5V	0A	3A	± 5%	± 1%	180mV
				9V	0A	2A	± 5%	± 1%	180mV
				12V	0A	1.5A	± 5%	± 1%	240mV
	45W	USB-C C+A	USB-C (30W)	5V	0A	3A	± 5%	± 1%	180mV
				9V	0A	3A	± 5%	± 1%	180mV
				12V	0A	2.5A	± 5%	± 1%	240mV
				15V	0A	2A	± 5%	± 1%	240mV
				20V	0A	1.5A	± 5%	± 1%	240mV
			USB-A (15W)	5V	0A	3A	± 5%	± 1%	180mV

NOTE:

1 : Ripple & Noise is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with a 0.1uF ceramic capacitor & paralled with 47uF aluminum capacitor at full load and nominal line.

2 : Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.

3 : Max. Power (W) ≥ Vo x Io

INPUT

- Input Range 100 to 240 VAC
- Frequency 50 to 60 Hz
- Input Current ≤ 1.5A
- Inrush Current ≤ 120A/230VAC
- Hold up time ≥ 8.3ms
- Turn On Time ≤ 3s

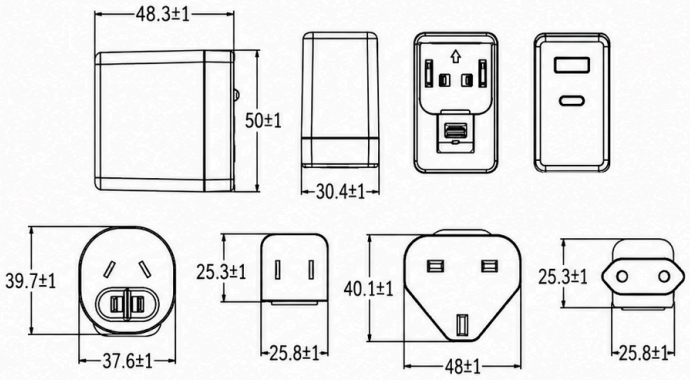
OUTPUT

- Short Circuit Protection Auto Recovery
- Over Voltage Protection Auto Recovery
- Over Current Protection Auto Recovery
- Over Temperature Protec Auto Recovery (optional)

ENVIRONMENT

- Operating Temperature -20 to 40°C
- Storage Temperature -20 to 85°C
- Operating Humidity 10% to 90 %
- Storage Humidity 5% to 95 %

MECHANICAL



- Case Size: 50L x 48.3W x 30.4H (mm)
- AC Plug: U: USA, E: EU, K: UK, A: SAA, C: China
  S: South Africa, B: Korea, I: India
- Weight: 200g

SAFETY

- Complied with UL 62368-1, CAN/CSA C22.2 No. 62368-1, TUV EN 62368-1, CB IEC 62368-1, FCC Part 15B, CE EMC(EN 55032+EN 55035)

Safety & Compliance

Safety Certified to recognised standards and built to meet regional compliance requirements (including CE/FCC/RoHS where applicable).

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