20 W AC/DC USB Type-C™ ADAPTER

20 Watt Value Power

HNP20F Interchangeable USB Type-C™ PD Adapter

HN-POWER

Besondere Merkmale	Features
Steckerschaltnetzteil	Plug in switching adaptor
Doppelte Isolation	Double insulated
Überlast- und kurzschlußfest	Overload, short circuit protection
Minimalster Leerlaufverlust	Lowest standby power consumption
EU CoC V5 tier 2 / EnergyStar DOE VI	EU CoC V5 tier 2/ EnergyStar DOE VI
Schnellladefunktion PD 3.0	Fast Charge with USB PD 3.0
Inklusive AC-Clips für EU,UK,AU und US	AC-clips for EU,UK,AU and US included

Anwendung	Application
Einplatinencomputer	Single board computers
Drahtlose Kommunikation	Wireless communications
Peripheriegeräte	Peripherals
Netztwerktechnik	Networking
Mobile Ausrüstungen	Portable equipment
Tablets	Tablets
Telekommunikation	Telecom
Aktuelle Smartphones	Latest Smartphones

Technische Daten	Specification
(bei 25°C Umgebungstemperatur)	at 25 °C ambient temperature

Eingangsdaten	Input Specifications0	
Eingangsspannung	Input voltages	100-240 VAC
Eingangsfrequenz	Input frequency	50/60 Hz
Eingangsstrom	Input current	0,7A all voltage range & output @full load
Netzausfallüberbrückung	Hold-up time, nom.conditions	20ms @230VAC
Einschaltstromstoß	Inrush current	100 A
Leerlaufverlust	No load power consumption	< 0.1 Watt

Ausgangsdaten	Output Specifications	
Leistung	Power	20 Watt
Wirkungsgrad	Efficiency	DOE VI / CoC V5 tier 2, see page 3
Ausregelzeit ±2%	Recovery time ±2%	max. 3 s
Restwelligkeit	Ripple and noise	max. 200mV pp

Allgemeine Daten	General Specifications	
Betriebstemperatur	Operating temperature	-10°C…+25°C
Lagertemperatur	Storage temperature	–20°C…+70°C
Luftfeuchte	Humidity	10...90% RH
Isolation	Dielectric Withstand (Hipot)	3000VAC 1min 5mA inp.<->outp.
Leckstrom	Leackage current	0.25mA max.@240 VAC
Überstromschutz	Overcurrent protection	Hiccup, auto restart
Überspannungsschutz	Overvoltage protection	Hiccup 18V Type-C
Zulassungsbestimmungen	Safety requirements	CE LVD EN62368-1:2014+A11:2017
		ETL UL 62368-1:2014 Ed.2; UKCA (see DoC)
EMV	EMC	EN55032:2015/A11:2020; EN55035:2017/A11:2020
		EN61000-3-2:2019; EN61000-3-3:2013+A1:2019
RoHS	RoHS	EN 63000 : 2018

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Bestell-Information / Order Information

Modell		Ausgang Output	Last/Load Min.	Max.
HNP20F-CPDV3		5 V	0.0 A	3.0 A
	oder / or	9 V	0.0 A	2.22 A - Type-C quick charging
	oder / or	12 V	0.0 A	1.67 A - Type-C quick charging

MEMO:

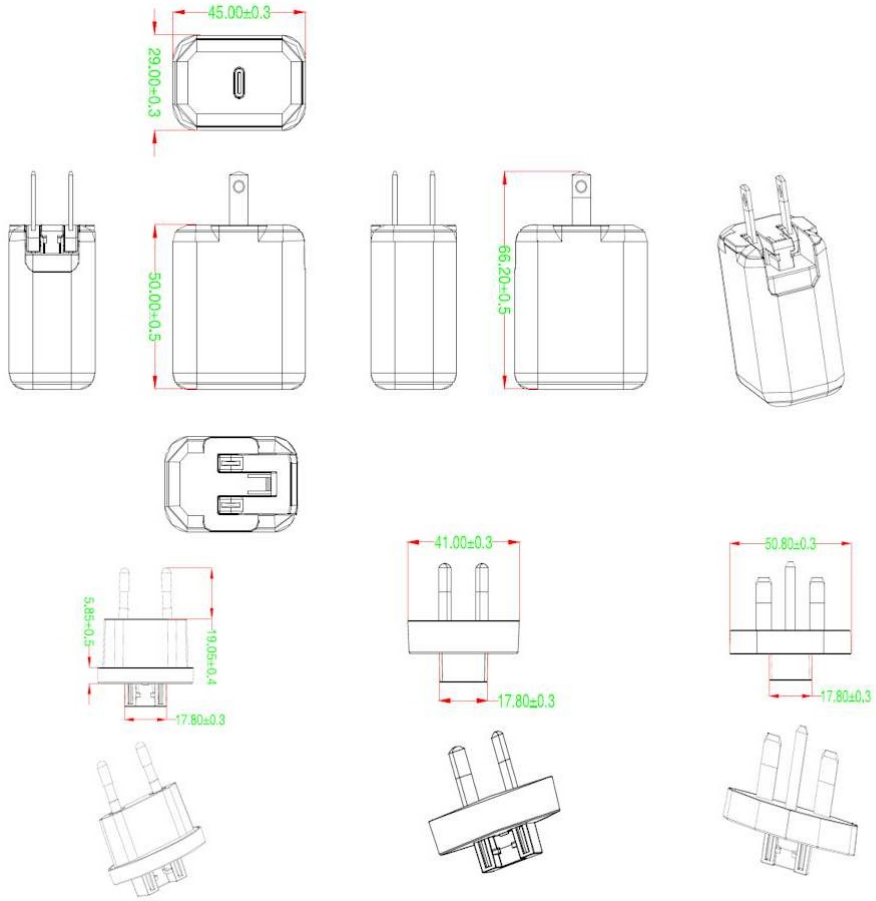
Vermerk
Andere Versionen (Eingangstecker / Farben) mit Mindestbestellmengen auf Anfrage
Lieferumfang : Netzteil mit klappbarem US-Eingang & 3 AC clips (EU,UK,AU)

Note
Other versions (AC-connectors / Colors) with minimum order quantities on request
Package content : Powersupply body with folding US input & 3 AC clips (EU,UK,AU)

Mechanik / Mechanical

L×B×H	L×W×H	45× 29 × 50 mm
Gewicht	Weight	70 g
Ausgang	Output	1x USB Socket / Type-C

PIN-Belegung und Zeichnung / Pin Assignments & Drawing



Model	Input Voltage/Frequency	Output Voltage(V)	Output Current(A)	Power for label	Average efficiency 平均效率	Efficiency at 10% load 10%负载效率	No load power consumption (Watt) 空载功耗
HNP65EU-C	230Vac / 50Hz	5,0	3,00	15.0W	84,57%	84,94%	0.18W
	230Vac / 50Hz	9,0	3,00	27.0W	88,61%	87,08%	0.18W
	230Vac / 50Hz	12,0	3,00	36.0W	89,86%	86,60%	0.18W
	230Vac / 50Hz	15,0	3,00	45.0W	90,55%	86,28%	0.18W
	230Vac / 50Hz	20,0	3,25	65.0W	91,29%	86,56%	0.18W
HNP65EU-1C	230Vac / 50Hz	5,0	3,00	15.0W	83,93%	74,87%	0.08W
	230Vac / 50Hz	9,0	3,00	27.0W	87,73%	80,24%	0.08W
	230Vac / 50Hz	12,0	3,00	36.0W	89,28%	83,74%	0.08W
	230Vac / 50Hz	15,0	3,00	45.0W	90,04%	85,46%	0.08W
	230Vac / 50Hz	20,0	3,25	65.0W	91,06%	86,69%	0.08W
HNP100EU-2C1A	230Vac / 50Hz	C1:5.0	C1：3.00	37.5W	83,65%	70,26%	0.17W
		C2:5.0	C2：2.25				
		A:5.0	A：2.25				
	230Vac / 50Hz	C1:21.0	C1:3.30	91.8W	90,39%	80,80%	0.17W
		C2:5.0	C2:2.25				
		A:5.0	A：2.25				
HNP140EU-3C1A	230Vac / 50Hz	C1:21.0 C2:21.0 C3:5.0 A:5.0	C1:3.095 C2:2.143 C3:1.50 A:1.50	95.0W	92,12%	82,06%	0.25W
	230Vac / 50Hz	C1:5.0 C2:5.0 C3:5.0 A：5.0	C1:3.00 C2:3.00 C3:1.50 A：1.50	95.0W	86,54%	70,72%	0.25W
HNP20EU-1C	230Vac / 50Hz	5,0	3,00	15.0W	84,82%	83,06%	0.08W
	230Vac / 50Hz	9,0	2,22	19.98W	87,68%	82,84%	0.08W
	230Vac / 50Hz	12,0	1,67	20.04W	88,13%	81,24%	0.08W
HNP45EU-1C	230Vac / 50Hz	5,0	3,00	15.0W	85,25%	78,53%	0.08W
	230Vac / 50Hz	9,0	3,00	27.0W	89,28%	84,64%	0.09W
	230Vac / 50Hz	12,0	3,00	36.0W	90,27%	85,07%	0.11W
	230Vac / 50Hz	15,0	3,00	45.0W	91,04%	85,71%	0.14W
	230Vac / 50Hz	20,0	2,25	45.0W	90,94%	82,78%	0.19W
HNP67EU-2C1A	230Vac / 50Hz	A:5.0 C2:5.0 C1:5.0	A:1.75 C2:1.75 C1:3.00	32.5W	85,75%	77,25%	0.19W
	230Vac / 50Hz	A:5.0 C2:5.0 C1:20.0	A:1.75 C2:1.75 C1:2.25	62.5W	91,15%	82,43%	0.19W
HNP30EU-1C1A	230Vac / 50Hz	C:5.0 A:5.0	C:1.50 A:1.50	15.0W	86,08%	80,43%	0.06W
	230Vac / 50Hz	C:20.0	C:1.50	30.0W	89,83%	79,78%	0.06W
HNP20F-CPDV3	230Vac / 50Hz	5,0	3,00	15.0W	83,49%	80,23%	0.037W
	230Vac / 50Hz	9,0	2,22	19.98W	88,56%	81,12%	0.057W
	230Vac / 50Hz	12,0	1,67	20.04W	89,46%	78,57%	0.083W
HNP40F-CPDV3	230Vac / 50Hz	5,0	3,00	15.0W	83,72%	82,70%	0.06W
	230Vac / 50Hz	9,0	3,00	27.0W	88,25%	85,39%	0.07W
	230Vac / 50Hz	12,0	3,00	36.0W	89,67%	87,13%	0.09W
	230Vac / 50Hz	15,0	2,66	39.9W	90,27%	86,89%	0.13W
	230Vac / 50Hz	20,0	2,00	40.0W	90,81%	85,47%	0.17W