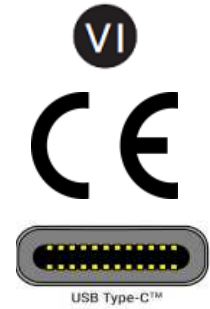


20 W
AC/DC

20 Watt Value Power

USB Type-C™
ADAPTER

HNP20EU-CPD USB Type-C™ PD 3.0 Adapter



HNP-POWER

Besondere Merkmale Features

| | |
|--------------------------------------|--------------------------------------|
| Steckerschaltnetzteil | Plug in switching adaptor |
| Doppelte Isolation | Double insulated |
| Kompakter Aufbau | Small low profile package |
| 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 & QC 3.0 | Fast Charge with USB PD 3.0 & QC 3.0 |

Anwendung Application

| | |
|-------------------------|-------------------------|
| Einplatinencomputer | Single board computers |
| Drahtlose Kommunikation | Wireless communications |
| Peripheriegeräte | Peripherals |
| Netzwerktechnik | Networking |
| Mobile Ausrüstungen | Portable equipment |
| Tablets | Tablets |
| Telekommunikation | Telecom |
| Aktuelle Smartphones | Newest Smartphones |

Technische Daten Specification

(bei 25°C Umgebungstemperatur) at 25 °C ambient temperature

Eingangsdaten Input Specifications

| | | |
|-------------------------|------------------------------|-------------------|
| Eingangsspannung | Input voltages | 90...264 VAC |
| Eingangsfrequenz | Input frequency | 47...63 Hz |
| Eingangsstrom | Input current | 700mA(rms) @90VAC |
| Netzausfallüberbrückung | Hold-up time, nom.conditions | 20ms @230VAC |
| Einschaltstromstoß | Inrush current | <60A/230VAC |
| Leerlaufverlust | No load power consumption | < 0.075 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. 1 s |
| Restwelligkeit | Ripple and noise | max. 200mV pp |

Allgemeine Daten General Specifications

| | | |
|------------------------|------------------------------|--|
| Betriebstemperatur | Operating temperature | -10°C...+35°C |
| Lagertemperatur | Storage temperature | -20°C...+70°C |
| Luftfeuchte | Humidity | 10...90% RH |
| Isolation | Dielectric Withstand (Hipot) | 4000VAC 1min 5mA inp.<->outp. |
| Leckstrom | Leakage current | 0.25mA max.@240 VAC |
| Überstromschutz | Overcurrent protection | Hiccup, auto restart |
| Überspannungsschutz | Overvoltage protection | Hiccup 20V Type-C |
| Zulassungsbestimmungen | Safety requirements | CE LVD EN62368-1:2014+A11:2017 |
| EMV | EMC | EN55032:2015; EN55035:2017 EN61000-3-3:2013+A1:2019 |
| RoHS | RoHS | 2015/863/EU |

20 Watt Value Power

HNP20EU-CPD USB Type-C™ PD 3.0 Adapter

20 W
AC/DC
USB Type-C™
ADAPTER

Bestell-Information / Order Information

| Modell | Ausgang Output | Last/Load | |
|-------------|----------------|-----------|--------------------------------|
| | | Min. | Max. |
| HNP20EU-CPD | 5 V | 0.0 A | 3.0 A |
| | oder / or | 9 V | 0.0 A |
| | oder / or | 12 V | 0.0 A |
| | | | 2.22 A - Type-C quick charging |
| | | | 1.67 A - Type-C quick charging |

MEMO:

Vermerk

Andere Versionen (Eingangstecker / Farben) mit Mindestbestellmengen auf Anfrage

Note

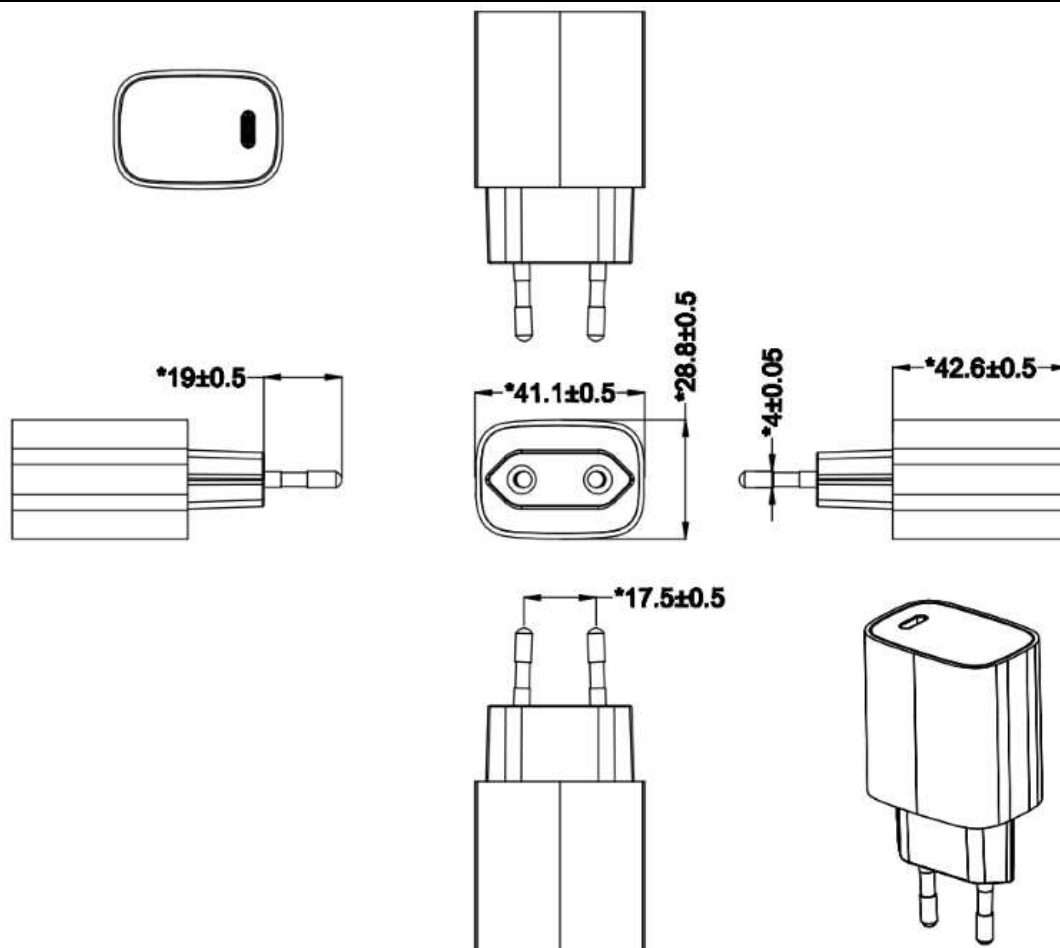
Other versions (AC-connectors / Colors) with minimum order quantities on request

Mechanik

Mechanical

| | | |
|---------|--------|-------------------------|
| LxBxH | LxWxH | 59 × 41 × 51 mm |
| Gewicht | Weight | 61 g |
| Ausgang | Output | 1x USB4 Socket / Type-C |

PIN-Belegung und Zeichnung / Pin Assignments & Drawing



Energieeffizienz / Efficiency (EU) 2019/1782

| Model | Input Voltage/Frequency | Output Voltage(V) | Output Current(A) | Power for label | Average efficiency | Efficiency at 10% load | No load power consumption (Watt) |
|-----------------------|-------------------------|-------------------|-------------------|-----------------|--------------------|------------------------|----------------------------------|
| HNP06-USBL6 | 230Vac / 50Hz | 5,0 | 1,50 | 7,5W | 77,46% | 78,85% | 0,07W |
| HNP06-050L6 | 230Vac / 50Hz | 5,0 | 1,50 | 7,5W | 77,46% | 78,85% | 0,07W |
| HNP06-051-MiniUSBL6 | 230Vac / 50Hz | 5,1 | 1,47 | 7,5W | 78,55% | 74,27% | 0,10W |
| HNP06-051-MicroUSBL6 | 230Vac / 50Hz | 5,1 | 1,47 | 7,5W | 78,01% | 73,98% | 0,10W |
| HNP06-060L6 | 230Vac / 50Hz | 6,0 | 1,25 | 7,5W | 78,13% | 78,13% | 0,05W |
| HNP06-090L6 | 230Vac / 50Hz | 9,0 | 0,83 | 7,5W | 81,45% | 77,22% | 0,06W |
| HNP06-120L6 | 230Vac / 50Hz | 12,0 | 0,62 | 7,5W | 80,71% | 77,66% | 0,09W |
| HNP06-MICROUSBL6 | 230Vac / 50Hz | 5,0 | 1,50 | 7,5W | 77,46% | 78,85% | 0,07W |
| HNP06-MINIUSBL6 | 230Vac / 50Hz | 5,0 | 1,50 | 7,5W | 77,46% | 78,85% | 0,07W |
| HNP06I-USBL6 | 230Vac / 50Hz | 5,0 | 1,50 | 7,5W | 77,13% | 78,15% | 0,08W |
| HNP06I-050L6 | 230Vac / 50Hz | 5,0 | 1,50 | 7,5W | 77,13% | 78,15% | 0,08W |
| HNP06I-051-MiniUSBL6 | 230Vac / 50Hz | 5,0 | 1,50 | 7,5W | 78,31% | 74,49% | 0,10W |
| HNP06I-051-MicroUSBL6 | 230Vac / 50Hz | 5,1 | 1,47 | 7,5W | 77,76% | 73,76% | 0,10W |
| HNP06I-090L6 | 230Vac / 50Hz | 9,0 | 0,83 | 7,5W | 80,18% | 76,48% | 0,07W |
| HNP06I-120L6 | 230Vac / 50Hz | 12,0 | 0,62 | 7,5W | 81,70% | 76,52% | 0,06W |
| HNP06I-MicroUSBL6 | 230Vac / 50Hz | 5,0 | 1,50 | 7,5W | 77,13% | 78,15% | 0,08W |
| HNP06I-MiniUSBL6 | 230Vac / 50Hz | 5,0 | 1,50 | 7,5W | 77,13% | 78,15% | 0,08W |
| HNP07-050V2 | 230Vac / 50Hz | 5,0 | 1,50 | 7,5W | 77,21% | 72,50% | 0,06W |
| HNP07-090V2 | 230Vac / 50Hz | 9,0 | 0,84 | 7,5W | 80,58% | 74,04% | 0,06W |
| HNP07-120V2 | 230Vac / 50Hz | 12,0 | 1,00 | 7,5W | 81,05% | 70,94% | 0,06W |
| HNP07-USBV2 | 230Vac / 50Hz | 5,0 | 1,50 | 7,5W | 77,15% | 72,51% | 0,06W |
| HNP12-USBL6 | 230Vac / 50Hz | 5,0 | 2,40 | 12,0W | 80,64% | 78,92% | 0,06W |
| HNP12-050L6 | 230Vac / 50Hz | 5,0 | 2,40 | 12,0W | 80,64% | 78,92% | 0,06W |
| HNP12-075L6-DC90-WHI | 230Vac / 50Hz | 7,5 | 1,35 | 10,1W | 82,29% | 76,13% | 0,08W |
| HNP12-075L6-A | 230Vac / 50Hz | 7,5 | 1,35 | 10,1W | 82,29% | 76,13% | 0,08W |
| HNP12-090L6 | 230Vac / 50Hz | 9,0 | 1,30 | 11,7W | 83,19% | 80,69% | 0,07W |
| HNP12-120L6 | 230Vac / 50Hz | 12,0 | 1,00 | 12,0W | 85,56% | 82,15% | 0,07W |
| HNP12-150L6 | 230Vac / 50Hz | 15,0 | 0,80 | 12,0W | 83,12% | 71,42% | 0,09W |
| HNP12-240L6 | 230Vac / 50Hz | 24,0 | 0,50 | 12,0W | 86,71% | 77,66% | 0,07W |
| HNP12-MicroUSBL6 | 230Vac / 50Hz | 5,0 | 2,40 | 12,0W | 80,64% | 78,92% | 0,06W |
| HNP12I-USBL6 | 230Vac / 50Hz | 5,0 | 2,40 | 12,0W | 80,41% | 78,96% | 0,06W |
| HNP12I-050L6 | 230Vac / 50Hz | 5,0 | 2,40 | 12,0W | 80,64% | 78,92% | 0,06W |
| HNP12I-090L6 | 230Vac / 50Hz | 9,0 | 1,30 | 11,7W | 83,44% | 81,01% | 0,07W |
| HNP12I-120L6 | 230Vac / 50Hz | 12,0 | 1,00 | 12,0W | 85,72% | 82,15% | 0,05W |
| HNP12I-150L6 | 230Vac / 50Hz | 15,0 | 0,80 | 12,0W | 83,12% | 71,42% | 0,09W |
| HNP12I-240L6 | 230Vac / 50Hz | 24,0 | 0,50 | 12,0W | 86,71% | 77,15% | 0,07W |
| HNP12I-MicroUSBL6 | 230Vac / 50Hz | 5,0 | 2,40 | 12,0W | 80,40% | 79,00% | 0,06W |
| HNP12-050V2 | 230Vac / 50Hz | 5,0 | 2,40 | 12,0W | 82,12% | 75,04% | 0,06W |
| HNP12-090V2 | 230Vac / 50Hz | 9,0 | 1,33 | 12,0W | 83,58% | 74,58% | 0,06W |
| HNP12-120V2 | 230Vac / 50Hz | 12,0 | 1,00 | 12,0W | 84,02% | 74,66% | 0,06W |
| HNP12-USBV2 | 230Vac / 50Hz | 5,0 | 2,40 | 12,0W | 83,54% | 76,44% | 0,06W |
| HNP18-USBV2 | 230Vac / 50Hz | 5,0 | 3,00 | 18,0W | 82,17% | 78,62% | 0,06W |
| HNP18-CV2 | 230Vac / 50Hz | 5,0 | 3,00 | 18,0W | 82,01% | 78,58% | 0,06W |
| HNP18-050V2 | 230Vac / 50Hz | 5,0 | 3,00 | 18,0W | 82,34% | 78,75% | 0,06W |
| HNP18-090V2 | 230Vac / 50Hz | 9,0 | 2,00 | 18,0W | 85,51% | 82,24% | 0,06W |
| HNP18-120V2 | 230Vac / 50Hz | 12,0 | 1,50 | 18,0W | 85,67% | 82,62% | 0,06W |
| HNP18-150V2 | 230Vac / 50Hz | 15,0 | 1,20 | 18,0W | 85,63% | 82,74% | 0,06W |
| HNP18-240V2 | 230Vac / 50Hz | 24,0 | 0,75 | 18,0W | 85,92% | 83,07% | 0,07W |
| HNP18I-USBV2 | 230Vac / 50Hz | 5,0 | 3,00 | 18,0W | 82,26% | 78,81% | 0,06W |
| HNP18I-CV2 | 230Vac / 50Hz | 5,0 | 3,00 | 18,0W | 82,15% | 78,69% | 0,06W |
| HNP18I-050V2 | 230Vac / 50Hz | 5,0 | 3,00 | 18,0W | 82,30% | 78,83% | 0,06W |
| HNP18I-090V2 | 230Vac / 50Hz | 9,0 | 2,00 | 18,0W | 85,43% | 82,15% | 0,06W |
| HNP18I-120V2 | 230Vac / 50Hz | 12,0 | 1,50 | 18,0W | 85,77% | 82,59% | 0,06W |
| HNP18I-150V2 | 230Vac / 50Hz | 15,0 | 1,20 | 18,0W | 85,74% | 82,95% | 0,06W |
| HNP18I-240V2 | 230Vac / 50Hz | 24,0 | 0,75 | 18,0W | 86,08% | 83,17% | 0,07W |
| HNP20EU-CPD | 230Vac / 50Hz | 5,0 | 3,00 | 15,0W | 81,39% | 78,44% | 0,10W |
| | 230Vac / 50Hz | 9,0 | 2,22 | 19,98W | 85,47% | 82,15% | 0,10W |
| | 230Vac / 50Hz | 12,0 | 1,67 | 20,04W | 85,48% | 82,16% | 0,10W |
| HNP24-090L6 | 230Vac / 50Hz | 9,0 | 2,50 | 22,5W | 86,14% | 84,15% | 0,05W |
| HNP24-120L6 | 230Vac / 50Hz | 12,0 | 2,00 | 24,0W | 86,12% | 83,58% | 0,05W |
| HNP24-150L6 | 230Vac / 50Hz | 15,0 | 1,60 | 24,0W | 86,74% | 82,89% | 0,09W |
| HNP24-240L6 | 230Vac / 50Hz | 24,0 | 1,00 | 24,0W | 87,64% | 84,06% | 0,07W |
| HNP24I-090L6 | 230Vac / 50Hz | 9,0 | 2,50 | 22,5W | 86,14% | 84,15% | 0,05W |
| HNP24I-120L6 | 230Vac / 50Hz | 12,0 | 2,00 | 24,0W | 86,12% | 83,58% | 0,05W |
| HNP24I-150L6 | 230Vac / 50Hz | 15,0 | 1,60 | 24,0W | 85,98% | 83,11% | 0,10W |
| HNP24I-240L6 | 230Vac / 50Hz | 24,0 | 1,00 | 24,0W | 87,64% | 84,06% | 0,07W |
| HNP36-4USB | 230Vac / 50Hz | 5,0 | 7,20 | 36,0W | 86,70% | 85,30% | 0,07W |
| HNP40-5USB | 230Vac / 50Hz | 5,0 | 8,00 | 40,0W | 84,68% | 82,61% | 0,07W |
| HNP42EU-050 | 230Vac / 50Hz | 5,0 | 5,00 | 25,0W | 84,28% | 80,90% | 0,10W |
| HNP42EU-090 | 230Vac / 50Hz | 9,0 | 3,00 | 27,0W | 85,90% | 81,26% | 0,10W |
| HNP42EU-120 | 230Vac / 50Hz | 12,0 | 3,50 | 42,0W | 88,05% | 84,41% | 0,10W |
| HNP42EU-150 | 230Vac / 50Hz | 15,0 | 2,80 | 42,0W | 88,47% | 84,21% | 0,10W |
| HNP42EU-240 | 230Vac / 50Hz | 24,0 | 1,75 | 42,0W | 89,20% | 84,15% | 0,10W |
| HNP42I-050 | 230Vac / 50Hz | 5,0 | 5,00 | 25,0W | 84,28% | 80,90% | 0,10W |
| HNP42I-090 | 230Vac / 50Hz | 9,0 | 3,00 | 27,0W | 87,02% | 84,03% | 0,08W |
| HNP42I-120 | 230Vac / 50Hz | 12,0 | 3,50 | 42,0W | 87,99% | 85,11% | 0,07W |
| HNP42I-150 | 230Vac / 50Hz | 15,0 | 2,80 | 42,0W | 88,84% | 86,01% | 0,08W |
| HNP42I-240 | 230Vac / 50Hz | 24,0 | 1,75 | 42,0W | 89,65% | 86,53% | 0,08W |
| HNP65F-120 | 230Vac / 50Hz | 12,0 | 5,00 | 60W | 88,15% | 86,23% | 0,09W |
| HNP65F-150 | 230Vac / 50Hz | 15,0 | 4,30 | 60W | 90,10% | 85,33% | 0,02W |
| HNP65F-240 | 230Vac / 50Hz | 24,0 | 2,70 | 60W | 90,78% | 87,56% | 0,01W |
| HNP65-120L6 | 230Vac / 50Hz | 12,0 | 5,00 | 60,0W | 89,00% | 83,00% | 0,16W |
| HNP65-150L6 | 230Vac / 50Hz | 15,0 | 4,30 | 64,5W | 89,50% | 83,00% | 0,16W |
| HNP65-240L6 | 230Vac / 50Hz | 24,0 | 2,72 | 65,2W | 90,00% | 83,00% | 0,16W |
| HNP-LED24EU-120L6 | 230Vac / 50Hz | 12,0 | 2,00 | 24W | 86,72% | 83,12% | 0,08W |
| HNP-LED24EU-240L6 | 230Vac / 50Hz | 24,0 | 1,00 | 24W | 87,28% | 85,02% | 0,08W |