

90 W
AC/DC
ADAPTER

90 Watt Value Power

HNP90M Adapter-Serie



HNP-POWER

Besondere Merkmale Features

Tischschaltnetzteil	Desktop switching adaptor
Geschlossenes Gehäuse	Non-vented/spill-proof case
Kompakter Aufbau	Small low profile package
Überlast- und kurzschlußfest	Overload, short circuit protection
Niedriger Leerlaufverlust	Low standby power consumption
EU CoC V5 tier 2 / EnergyStar DOE VI	EU CoC V5 tier 2/ EnergyStar DOE VI
Weiss oder Schwarz (mit MOQ)	White or black color (with MOQ)

Anwendung Application

Drahtlose Kommunikation	Wireless communications
Peripheriegeräte	Peripherals
Netzwerktechnik	Networking
Mobile Ausrüstungen	Portable equipment
Telekommunikation	Telecom

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	1.5A(rms) @ 90VAC
Netzausfallüberbrückung	Hold-up time, nom.conditions	20ms@230VAC
Einschaltstromstoß	Inrush current	<100A/230VAC
Leerlaufverlust	No load power consumption	max. 0.21 Watt

Ausgangsdaten Output Specifications

Leistung	Power	max. 90 Watt
Wirkungsgrad	Efficiency	>88%
Anschaltverzögerung	Recovery time ±2%	max. 1 ms
Restwelligkeit	Ripple and noise	typ. 200mV pp

Allgemeine Daten General Specifications

Betriebstemperatur	Operating temperature	-10°C...+40°C
Lagertemperatur	Storage temperature	-20°C...+70°C
Luftfeuchte	Humidity	10...90%RH
Isolation	Dielectric Withstand (Hipot)	4000V 1min pri->sec
Leckstrom	Leackage current	2.5mA max.@240 VAC
Überstromschutz	Overcurrent protection	hiccup, auto restart
Überspannungsschutz	Overvoltage protection	typ. 120 % (Zener diode)
Zulassungsbestimmungen	Safety requirements	CE LVD EN62368-1:2014+A11:2017

EMV	EMC	EN55032:2015+A11:2020 Class B; EN55035:2017 EN61000-3-2:2019;EN61000-3-3:2013+A1:2019
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RoHS	RoHS	2015/863/EU
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Bestell-Information / Order Information

Modell	Ausgang Output	Last/Load	
		Min.	Max.
HNP90M-120	12 V	0.0 A	7.0 A
HNP90M-190	19 V	0.0 A	4.7 A
HNP90M-240	24 V	0.0 A	3.75 A

Andere Spannungen (12-14 & 18-24 Volt) / DC-Stecker mit Mindestbestellmengen auf Anfrage -
Other voltages (12-14 & 18-24 Volt) / DC-connectors with MOQ on request
Standardfarbe Weiss - Optional in Schwarz mit MOQ / White color standard, black option with MOQ

Vermerk

1-Restwelligkeit gemessen mit einer 25 cm verdrehten Leitung, welche mit einer 10 µF-Kapazität abgeschlossen wird und zu einer 0,1 µF-Kapazität parallel geschaltet ist.

1-Ripple and Noise is measured by using a 12 inch twisted pair cable, terminated with a 10 µF capacitor and a 0.1 µF ceramic in parallel.

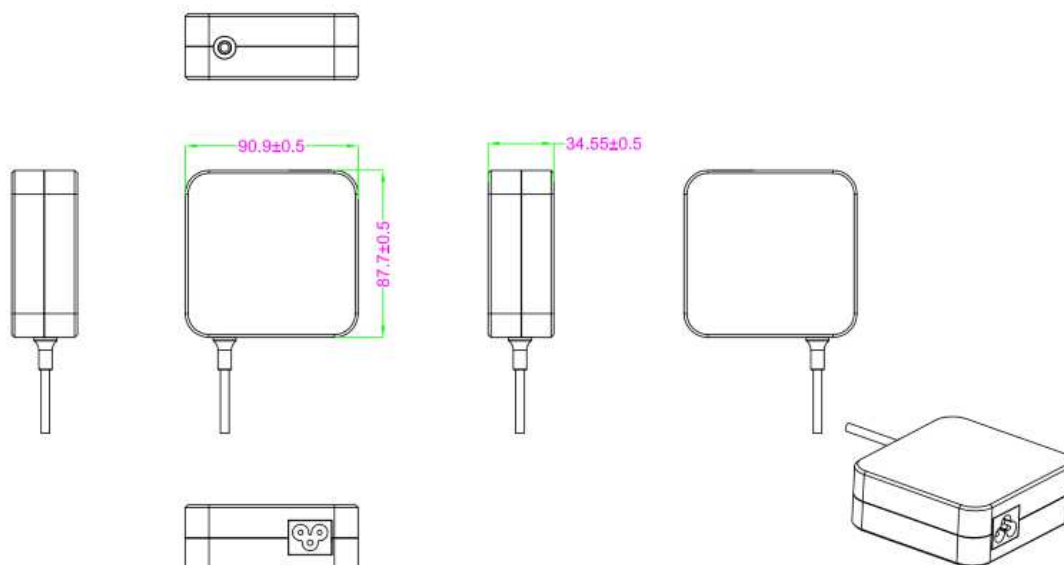
MEMO:

Mechanik

Mechanical

L×B×H	L×W×H	91 × 88 × 35 mm
Gewicht	Weight	360 g
DC-Stecker	DC-connector	2.1 x 5.5 x 10 mm , inside positive, outside negative
DC-Kabel	DC-cable	L=1500mm , UL1185 18AWG

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
HNP06-060L6	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-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
HNP12-090L6	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
HNP20EU-CPDV2	230Vac / 50Hz	5.0V	3.0A	15.0W	84,80%	79,16%	0.03W
	230Vac / 50Hz	9.0V	2.22A	19.98W	88,57%	81,70%	0.03W
	230Vac / 50Hz	12.0V	1.67A	20.04W	88,78%	78,82%	0.03W
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
HNP30EU-CPD	230Vac / 50Hz	5.0V	3.0A	15.0W	85,16%	80,20%	0.07W
	230Vac / 50Hz	9.0V	3.0A	27.0W	88,15%	83,58%	0.07W
	230Vac / 50Hz	12.0V	2.5A	30.0W	89,03%	82,83%	0.07W
	230Vac / 50Hz	15.0V	2.0A	30.0W	89,16%	81,45%	0.07W
	230Vac / 50Hz	20.0V	1.5A	30.0W	88,68%	77,83%	0.07W
HNP36-4USB	230Vac / 50Hz	5.0	7.20	36.0W	86,70%	85,30%	0.07W
HNP36I-4USB	230Vac / 50Hz	5.0	7.20	36.0W	86,70%	85,30%	0.07W
HNP40F-2CPD	230Vac / 50Hz	5.0V	3.0A	15.0W	85,66%	80,00%	0.17W
	230Vac / 50Hz	9.0V	2.22A	19.98W	89,08%	82,04%	0.17W
	230Vac / 50Hz	12.0V	1.67A	20.04W	89,55%	80,72%	0.17W
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
HNP65EU-CPDGaN	230Vac / 50Hz	5.0V	3.0A	15.0W	84,30%	69,23%	0.07W
	230Vac / 50Hz	9.0V	3.0A	27.0W	88,03%	76,96%	0.07W
	230Vac / 50Hz	12.0V	3.0A	36.0W	88,86%	79,13%	0.07W
	230Vac / 50Hz	15.0V	3.0A	45.0W	89,57%	82,09%	0.07W
	230Vac / 50Hz	20.0V	3.25A	65.0W	90,46%	83,75%	0.07W
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
HNP90M-120	230Vac / 50Hz	12.0V	7.0A	84.0W	88,59%	89,98%	0.10W
HNP90M-190	230Vac / 50Hz	19.0V	4.7A	89.3W	88,62%	87,51%	0.12W
HNP90M-240	230Vac / 50Hz	24.0V	3.75A	90.0W	89,58%	86,49%	0.13W
HNP120M-120	230Vac / 50Hz	12.0V	8.0A	96.0W	88,56%	89,18%	0.14W
HNP120M-240	230Vac / 50Hz	24.0V	5.0A	120.0W	88,49%	72,54%	0.13W
HNP120M-480	230Vac / 50Hz	48.0V	2.7A	129.6W	89,64%	87,68%	0.11W
HNP180U-120	230Vac / 50Hz	12.0V	8.5A	102.0W	88,61%	80,16%	0.07W
HNP180U-240	230Vac / 50Hz	24.0V	7.5A	180.0W	91,35%	85,82%	0.03W
HNP180U-480	230Vac / 50Hz	48.0V	3.7A	177.6W	91,02%	82,22%	0.02W