

## NPT40-M Series

55 Watts

### Data Sheet

**Total Power:** 45 - 55 Watts  
**Input Voltage:** 90 - 264 Vac  
120 - 300 Vdc  
**# of Outputs:** Triple

### SPECIAL FEATURES

- Medical and ITE safety approvals
- Universal input
- Less than 1U high
- 2" x 4" footprint
- Overload and short circuit protection
- High MTBF
- Built in EMI filter (CISPR 22 Class B)
- 0 °C to +80 °C operation
- Input power < 74 watts
- Complies with EN61000-3-2
- Class I approved
- Class II approved (with Class A EMI)
- LPX100 enclosure kit available
- Dual AC fuses
- RoHS compliant

### SAFETY

- TUV: 60950, 60601-1, 3rd edition
- UL: 60950, 60601-1
- CSA: 60950, 60601-1
- CB: Certificate and report 3rd edition
- CE: Mark (LVD)
- CQC: Mark



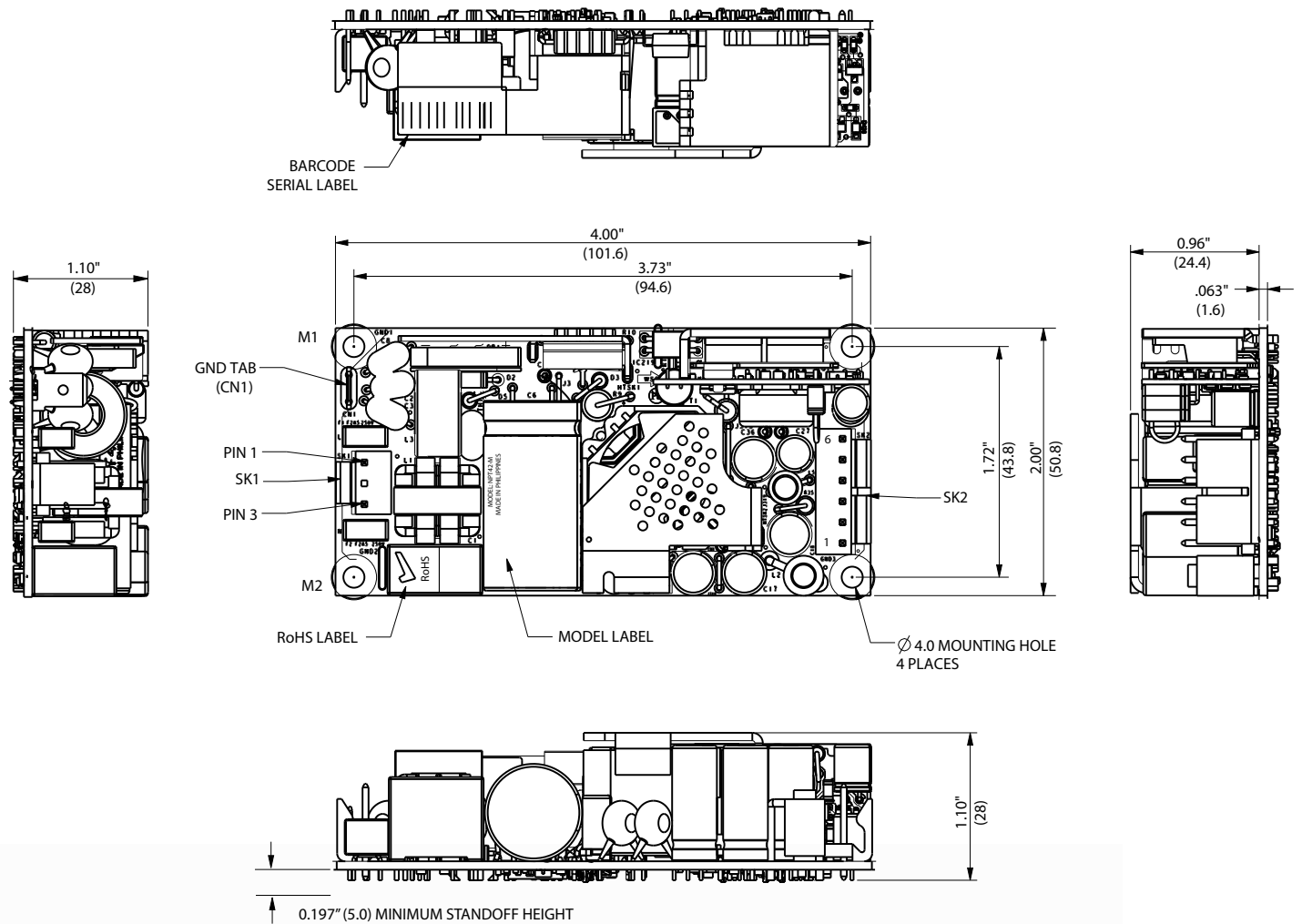
### Electrical Specifications

Input	
Input range	90 - 264 Vac (wide range) 127 - 300 Vdc
Frequency	47 - 440 Hz
Inrush current	< 50 A peak @ 230 Vac, cold start @ 25 °C
Input power	< 74 Watts
Efficiency	75% average
EMI/RFI	FCC Class B conducted; CISPR 22 Class B conducted; EN55022 Class B conducted, VDE0878PT3 Class B conducted
Safety ground leakage current	275 µA @ 50/60 Hz; 264 Vac input
Output	
Maximum power	45 W for convection 55 W with 30CFM forced air
Hold-up time	10/20 ms 115/230 Vac input line
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110% to 160% above peak rating
Overvoltage protection	6.5 to 7.5 Vdc on the main output

### Environmental Specifications

Operating temperature	0 ° to 50 °C ambient derate each output at 2.5% per degree from 50 °C to 80 °C. -20 °C start up
Storage temperature	-45 °C to +85 °C
Electromagnetic susceptibility	Designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3
Humidity	Operating; non-condensing 10% to 90% RH
Vibration	IEC68-2-6 to the levels of IEC721-3-2
MTBF demonstrated	> 550,000 hours at full load and 25 °C ambient conditions

### Mechanical Drawing



### Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
<b>NPT42-M</b>	+5 V	0.5 A	5 A	8 A	9 A	± 2%	50 mV
	+12 V	0.1 A	2.5 A	3 A	4 A	± 5%	120 mV
	-12 V	0 A	0.5 A	0.7 A	0.7 A	± 5%	120 mV
<b>NPT43-M</b>	+5 V	0.5 A	5 A	8 A	9 A	± 2%	50 mV
	+15 V	0.1 A	2 A	2.4 A	4 A	± 5%	150 mV
	-15 V	0 A	0.5 A	0.7 A	0.7 A	± 5%	150 mV
<b>NPT44-M</b>	+5 V	0.5 A	5 A	8 A	9 A	± 2%	50 mV
	+24 V	0.1 A	1.0 A	1.5 A	2 A	± 5%	240 mV
	+12 V	0 A	0.5 A	0.7 A	0.7 A	± 5%	120 mV

1. Peak current lasting < 30 seconds with a maximum 10% duty cycle.
2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.
4. Minimum loads are required.
5. This product is a Component Power Supply and is only for inclusion by professional installers within other equipment and must not be operated as a standalone product. EMC compliance to appropriate standards must be verified at the system level. This product is for sale to OEMs and System Integrators, including through Distribution Channels. It is not intended for sale to End Users.

### Pin Assignments

Connector	NPT42-M	NPT43-M	NPT44-M
<b>SK1-1</b>	Line	Line	Line
<b>SK1-3</b>	Neutral	Neutral	Neutral
<b>CN1</b>	Ground	Ground	Ground
<b>SK2-1</b>	+5 V	+5 V	+5 V
<b>SK2-2</b>	+5 V	+5 V	+5 V
<b>SK2-3</b>	Common	Common	Common
<b>SK2-4</b>	Common	Common	Common
<b>SK2-5</b>	-12 V	-15 V	+12 V
<b>SK2-6</b>	+12 V	+15 V	+24 V

### Mating Connectors

<b>AC Input</b>	Molex 09-50-8031 PINS: 08-52-0113
<b>DC Outputs</b>	Molex 09-50-8061 PINS: 08-52-0113
Artesyn Embedded Power Connector Kit #70-841-006, includes all of the above.	

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ± 0.02" (± 0.5 mm)
3. Mounting holes M1 and M2 should be grounded for EMI purposes.
4. Mounting hole M1 is safety ground connection.
5. Ground faston tab size is 6.35 mm x 0.80 mm
6. Specifications are for convection rating at factory settings at 115 Vac input, 25 °C unless otherwise stated.
7. Warranty: 2 years
8. Weight: 0.3 lbs/.14 kg

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