

# **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</p>
- 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, 60601-1CSA: 60950, 60601-1

CB: Certificate and report

3rd edition

CE: Mark (LVD)CQC: Mark

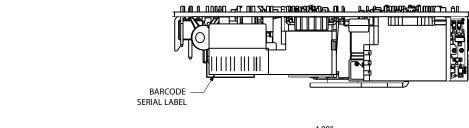


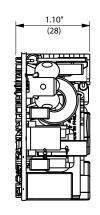
Electrical Specifications			
Input			
Input range	90 - 264 Vac (wide range) 127 - 300 Vdc		
Frequency	47 - 440 Hz		
Inrush current	< 50 A peak @ 230 Vac, cold start @ 25 °C		
Input power	< 74 Watts		
Efficiency	75% average		
EMI/RFI	FCC Class B conducted; CISPR 22 Class B conducted; EN55022 Class B conducted, 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		

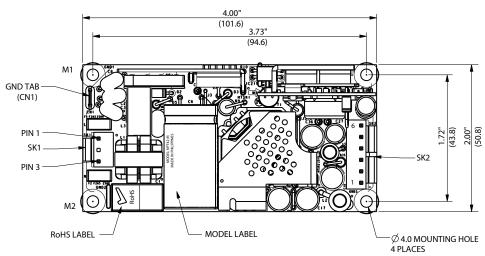


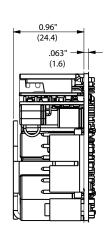
Environmental Specifications		
Operating temperature	0 ° to 50 °C ambient derate each output at 2.5% per degree from 50 °C to 80 °C20 °C start up	
Storage temperature	-45 °C to +85 °C	
Electromagnetic susceptibility	Designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3	
Humidity	Operating; 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	

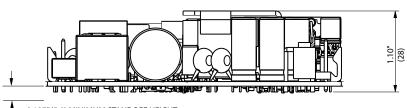
# **Mechanical Drawing**











0.197" (5.0) MINIMUM STANDOFF HEIGHT

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>
NPT42-M	+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
NPT43-M	+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
NPT44-M	+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.

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- 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	
SK1-1	Line	Line	Line	
SK1-3	Neutral	Neutral	Neutral	
CN1	Ground	Ground	Ground	
SK2-1	+5 V	+5 V	+5 V	
SK2-2	+5 V	+5 V	+5 V	
SK2-3	Common	Common	Common	
SK2-4	Common	Common	Common	
SK2-5	-12 V	-15 V	+12 V	
SK2-6	+12 V	+15 V	+24 V	

Mating Connectors		
AC Input	Molex 09-50-8031 (USA) 09-93-0300 (UK) PINS: 08-52-0113	
DC Outputs	Molex 09-50-8061 (USA) 09-93-0600 (UK) PINS: 08-52-0113	
Artesyn Embedded Technologies 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  $\pm$  0.02" ( $\pm$  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

## **WORLDWIDE OFFICES**

#### **Americas**

2900 S.Diablo Way Tempe, AZ 85282 USA +1 888 412 7832

#### **Europe (UK)**

Waterfront Business Park Merry Hill, Dudley West Midlands, DY5 1LX United Kingdom +44 (0) 1384 842 211

### Asia (HK)

14/F, Lu Plaza 2 Wing Yip Street Kwun Tong, Kowloon Hong Kong +852 2176 3333



www.artesyn.com

For more information: www.artesyn.com/power For support: productsupport.ep@artesyn.com