

SNP-Y04 Series

45 W AC/DC Switch Mode Power Supplies - Medical

CoolPower
Solutions

- Medical ja ITE sovelluksiin
- Korkeus vain 1.2"
- 4.7W / kuutiotuuma
- Edulliset asennuskulut yksipuoleisen kortin ansiosta
- Hyötysuhde 76%...85%
- Käyttölämpötila-alue 0°C...70°C
- With Medical & ITE safety
- Only 1.2 inch height
- 4.7W / cubic inch
- Single side PCB for low assembly cost
- Efficiency between 76% to 85%
- Operation from 0°C to 70°C by convection



Tekniset tiedot

Tulojännite:
Tulotaajuus:
Syökyvirta:
Lähtöjännite:
Maks. teho:
Maks. virta:
Kuormaregulointi:
Linjaregulointi:

Lämpötila-alue:

Rippeli:
Hyötysuhde:

Pitoaika:
Maavuotovirta:
Ylikuormitussuojaus:
Oikosulkusuojaus:
Ylijännitesuojaus:
Jäähdytys:
Varastointilämpötila:
Sähköiset turvanormit:

EMC standardit:

- Emissio:
- Immunitaetti:

Mitat (PxLxK):
Liitännät:

Paino:

Technical specifications

Input voltage: 90-264 VAC
Input Frequency: 47-63 Hz
Inrush Current: < 60 A at 230 VAC
Output voltage: See table
Max. output power: 45 W, Peak 60 W
Max. load current: See table
Load regulation: See table
Line regulation: $\pm 1,0\%$

Temperature range: 0°C ... +70°C
Derating: 2,5%/°C>50
Ripple: 1%
Efficiency: 76% ...85% see table
(rated load and 115VAC)
Hold up time: 14ms typical
Earth leakage current: < 300 μ A
Overload protection: Auto recovery
Short Circuit Protection: Auto recovery
Over Voltage protection: Latch off
Cooling: Free air convection
Storage temperature: -40°C ... +85°C
Electrical safety standard: EN 60950-1, EN 60601-1, UL 60950-1, UL 60601-1, CSA C22.2 No. 60950-1, 601.1

EMC standards
• Emission: EN61000-4-2,-3,-4,-5,-6,-8,-11
• Immunity: FCC" B", EN 55022" B", EN55011" B"
Dimensions (LxWxH): 101.6 x 50.8 x 30.4 mm
Connections: AC input: JST B2P3-VH
DC output: JST B4P-VH
JST B6P-VH for multiple outputs
127 g

Jotkin tekniset arvot saattavat vaihdella muiden mallien ja jänniteversioiden osalta.

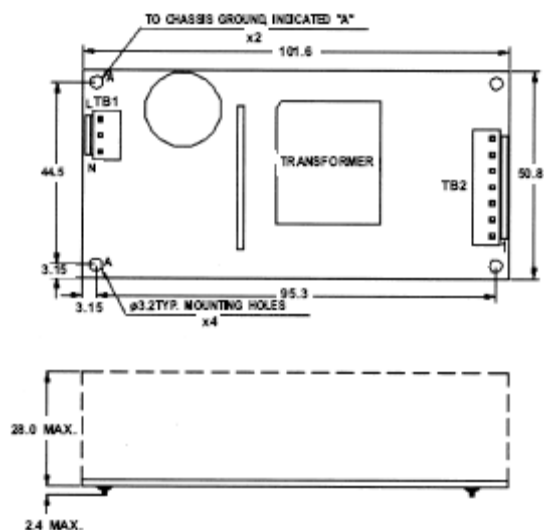
Some technical specifications may differ for other models and voltage versions.

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Mekaaniset tiedot – Mechanical Specifications



1. Dimensions shown in mm as left. Tolerance: ± 1 mm.
2. Size 50.8 x 101.6 x 30.4 mm. (2"x4"x1.2")
3. Connectors:
AC input: JST B2P3-VH or equivalent
DC output: JST B4P-VH or equivalent for single
JST B6P-VH or equivalent for multiple outputs
4. Output Pin assignment:

Pin no:	1	2	3	4	5	6
SNP-Y041	+5.0V	+5.0V	GND	GND	+ 12V	- 12V
SNP-Y043	+5.0V	+5.0V	GND	GND	+ 12V	NC
SNP-Y04F	+5.0V	+5.0V	GND	GND	+ 24 V	+ 12V
SNP-Y046	+5.0V	+5.0V	GND	GND		
SNP-Y047	+ 12V	+ 12V	GND	GND	+5.0V	NC
SNP-Y047-1	+ 12V	+ 12V	GND	GND		
SNP-Y048	+ 15V	+ 15V	GND	GND	+5.0V	NC
SNP-Y048-1	+ 15V	+ 15V	GND	GND		
SNP-Y049	+ 24 V	+ 24 V	GND	GND	+5.0V	NC
SNP-Y049-1	+ 24 V	+ 24 V	GND	GND		
SNP-Y04T	+ 48V	+ 48V	GND	GND		

Jänniteversiot – Voltage versions

Malli Model	Lähtöjännite (VDC) Output voltage (VDC)		Kuormitus (A) Load (A)				Rippeli Ripple	Load reg. Regulointi	Hyötösuhde Efficiency
	Nimellinen Nominal	Tarkkuus Accuracy	Min	Rated	Max	Peak			
SNP-Y041	+5.0 V	+4.9V...+5.1V	0 A	3.0 A	4.0 A	5.0 A	1 %	± 3 %	80 %
	+12 V	+11.4V...+12.6V	0 A	2.0 A	3.0 A	4.0 A	1 %	± 3 %	
	-12 V	-11.4V...-12.6V	0 A	0.3 A			1 %	± 5 %	
SNP-Y043	+5.0 V	+4.9V...+5.1V	0 A	3.0 A	4.0 A	5.0 A	1 %	± 3 %	80 %
	+12 V	+11.4V...+12.6V	0 A	2.3 A	3.3 A	4.0 A	1 %	± 3 %	
SNP-Y04F	+5.0 V	+4.95V...+5.05V	0 A	3.0 A	4.0 A	6.0 A	1 %	± 3 %	81 %
	+24 V	+22.8V...+25.2V	0 A	1.0 A	1.5 A	2.4 A	1 %	± 3 %	
	+12 V	+11.4V...+12.6V	0 A	0.3 A			1 %	± 5 %	
SNP-Y046	+5.0 V	+4.95V...+5.05V	0 A	7.0 A		10 A	1 %	± 1 %	77 %
SNP-Y047	+12 V	+11.88V...+12.12V	0 A	3.3 A		5.0 A	1 %	± 1 %	80 %
	+5.0 V	+4.75V...+5.25V	0 A	0.5 A			1 %	± 1 %	
SNP-Y047-1	+12 V	+11.88V...+12.12V	0 A	3.7 A		5.0 A	1 %	± 1 %	81 %
SNP-Y048	+15 V	+14.85 V...+15.15 V	0 A	2.6 A		4.0 A	1 %	± 1 %	80 %
	+5.0 V	+4.75 V...+5.25 V	0 A	0.5 A			1 %	± 1 %	
SNP-Y048-1	+15 V	+14.85 V...+15.15 V	0 A	3.0 A		4.0 A	1 %	± 1 %	81 %
SNP-Y049	+24 V	+23.75V...+24.24V	0 A	1.7 A		2.5 A	1 %	± 1 %	82 %
	+5.0 V	+4.75 V...+5.25 V	0 A	0.5 A			1 %	± 1 %	
SNP-Y049-1	+24 V	+23.75V...+24.24V	0 A	1.9 A		2.5 A	1 %	± 1 %	83 %
SNP-Y04T	+48 V	+47.5V...48.4V	0 A	1.0 A		1.35 A	1 %	± 1 %	85 %

* Saatavilla myös DIN-kiskokiinnikkein
* Available with bracket for DIN-rail montage.

Huomioitavaa – Notes

1. At peak load, the output can last for 8 seconds without shut down.
2. The maximum combinational load of SNP-Y04D for +3.3V & +5V is 28W.
3. At factory, all outputs in 60% rated load condition, each output is checked to be within the accuracy range while the main output is setting to within the specified accuracy range at rated load.
4. Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
5. Load regulation is defined by changing $\pm 40\%$ of measured output load from 60% rated load at another output set to 60% rated load.
6. Ripple & noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
7. Hold up time is measured from the end of the last charging pulse to the time which the main output drop down to regulation limit at rated load and nominal line.
8. The efficiency is measured at nominal line and rated load.