SNP-Z15 Series

150 W AC/DC Switch Mode Power Supplies – IT & Medical Applications

CoolPower Solutions

- Tehokerroinkorjattu PFC
- ITE ja Medical sovelluksiin
- Korkeus vain 1.5”
- 3.9 W / kuutiotuuma
- Hyötysuhde 79%...88%
- Käyttölämpötila-alue 0°C…70°C

- Built-in PFC
- With ITE & Medical safety
- Only 1.5 inch height
- 3.9 Watt per cubic inch
- Efficiency between 79% to 88%
- Operation from 0°C to 70°C by convection



Tekniset tiedot	**Technical specifications**	
Tulojännite:	Input voltage:	90-264 VAC
Tulotaajuus:	Input Frequency:	47-63 Hz
Tehokerroin:	Power factor:	> 0.93
Syöksyvirta:	Inrush Current:	< 60 A at 230 VAC Cold start, 25°C
Lähtöjännite:	Output voltage:	See table
Maks. teho:	Max. output power:	150 W, Peak 220 W 8 s.
Maks. virta:	Max. load current:	See table
Kuormaregulointi:	Load regulation:	See table
Linjaregulointi:	Line regulation:	± 0.5 %
Lämpötila-alue:	Temperature range:	0°C … +70°C Derating: 2,5%/°C>50
Rippeli:	Ripple:	1 %. See table
Hyötysuhde:	Efficiency:	79% …88% see table (rated load and 115VAC)
Pitoaika:	Hold up time:	20 ms typical (rated load and 115VAC)
Ylikuormitussuojaus:	Overload protection:	Auto recovery
Oikosulkusuojaus	Short Circuit Protection:	Auto recovery
Ylijännitesuojaus:	Over Voltage protection:	Latch off
Jäähdytys:	Cooling:	Free air convection
Varastointilämpötila:	Storage temperature:	-40°C … +85°C
Sähköiset turvanormit:	Electrical safety standard:	EN 60950-1, EN 60601-1, UL 60950-1, UL 2601 CSA C22.2 No. 60950-1, No. 601.1
EMC standardit:	EMC standards	
• Emissio:	• Emission:	EN61000-4-2,-3,-4,-5,-6,-8,-11
• Immuniteetti:	• Immunity:	FCC”B”, EN 55022”B”, EN55011”B”
Mitat (PxLxK):	Dimensions (LxWxH):	178 x 97 x 38 mm 6.8” x 3.8” x 1.5”
Paino:	Weight:	555 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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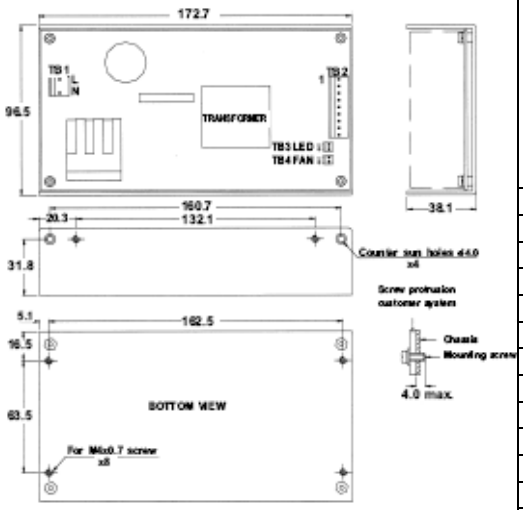
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Mekaaniset tiedot – Mechanical Specifications



1. Dimensions shown in mm as left. Tolerance: ± 1 mm.
2. Size 96.5 x 172.7 x 38.1 mm. (3.8"x6.8"x1.5")
3. Connectors:
   AC input: Molex 5277-02A or equivalent
   DC output: Molex 5277-12A or equivalent
   Molex 5273-9A or equivalent
   LED: Molex 5045-02A or equivalent
   Fan: Molex 5045-02A or equivalent
   Remote Sense: Molex 5045-02A or equivalent for SNP-Z156
4. Output Pin assignment:

Pin no:	1	2	3	4	5	6	7	8	9	10	11	12
SNP-Y151	-12V	+5.0V	+5.0V	+5.0V	GND	GND	GND	GND	GND	+12V	+12V	+12V
SNP-Y15E	+12V	-12V	+3.3V	+3.3V	+3.3V	GND	GND	GND	GND	GND	+5.0V	+5.0V
SNP-Y153	NC	+5.0V	+5.0V	+5.0V	GND	GND	GND	GND	GND	+12V	+12V	+12V
SNP-Y156	+5.0V	+5.0V	+5.0V	+5.0V	+5.0V	+5.0V	GND	GND	GND	GND	GND	GND
SNP-Y157	+5.0V	GND	GND	GND	GND	+12V	+12V	+12V	+12V			
SNP-Y157-1	NC	GND	GND	GND	GND	+12V	+12V	+12V	+12V			
SNP-Y158	+5.0V	GND	GND	GND	GND	+15V	+15V	+15V	+15V			
SNP-Y158-1	NC	GND	GND	GND	GND	+15V	+15V	+15V	+15V			
SNP-Y159	+5.0V	GND	GND	GND	GND	+24 V	+24 V	+24 V	+24 V			
SNP-Y159-1	+5.0V	GND	GND	GND	GND	+24 V	+24 V	+24 V	+24 V			
SNP-Y15T	NC	GND	GND	GND	GND	+48 V	+48 V	+48 V	+48 V			
SNP-Y15F	+12V	-12V	+5.0V	+5.0V	+5.0V	GND	GND	GND	GND	GND	GND	+24 V

Jänniteversiot – Voltage versions

Malli Model	Lähtöjännite (VDC) Output voltage (VDC)		Kuormitus (A) Load (A)				Rippeli Ripple	Load reg Regulointi	Hyötysuhde Efficiency
	Nimellinen Nominal	Tarkkuus Accuracy	Min	Rated	Max	Peak			Tyypillinen Typical
SNP-Z151	+5 V +12 V -12 V	+4.9 V…+5.1 V +11.4 V…+12.6 V -11.4 V…-12.6 V	0 A 0 A 0 A	10.0 A 7.0 A 0.5 A	13 A 10 A	15 A	1 % 1 % 1 %	± 3 % ± 3 % ± 5 %	83 %
SNP-Z15E	+3.3 V +5 V +12 V -12 V	+3.3 V…+3.4 V +4.75 V…+5.25 V +11.4 V…+12.6 V -11.4 V…-12.6 V	0 A 0 A 0 A 0 A	10 A 8.0 A 3.5 A 0.5 A			50mVpp 1 % 1 % 1 %	± 3 % ± 3 % ± 5 % ± 5 %	81 %
SNP-Z153	+5 V +12 V	+4.9 V…+5.1 V +11.4 V…+12.6 V	0 A 0 A	10 A 7.0 A	13 A 10 A	15 A	1 % 1 %	± 3 % ± 3 %	83 %
SNP-Z156	+5 V	+4.95 V…+5.05 V	0 A	28 A			1 %	± 1 %	82 %
SNP-Z157	+12 V +5 V	+11.8 V…+12.2 V +4.9 V…+5.1 V	0 A 0 A	12 A 2.0 A		17.5 A	1 % 1 %	± 1.5 % ± 1.5 %	84 %
SNP-Z157-1	+12 V	+11.8 V…+12.2 V	0 A	13 A		17.5 A	1 %	± 1.5 %	85 %
SNP-Z158	+15 V +5 V	+14.85 V…+15.15 V +4.9 V…+5.1 V	0 A 0 A	9.6 A 2.0 A		14 A	1 % 1 %	± 1.5 % ± 1.5 %	85 %
SNP-Z158-1	+15 V	+14.85 V…+15.15 V	0 A	10 A		14 A	1 %	± 1.5 %	85 %
SNP-Z159	+24 V +5 V	+23.76 V…+24.24 V +4.9 V…+5.1 V	0 A 0 A	6.0 A 2.0 A		8.8 A	1 % 1 %	± 1.5 % ± 1.5 %	86 %
SNP-Z159-1	+24 V	+23.76 V…+24.24 V	0 A	6.5 A		8.8 A	1 %	± 1.5 %	86 %
SNP-Z15T	+48 V	+47.6 V…+48.4 V	0 A	3.2 A		4.6 A	1 %	± 1 %	88 %
SNP-Z15F	+5 V +24 V +12 V -12 V	+4.9 V…+5.1 V +22.8 V…+25.2 V +11.4 V…+12.6 V -11.4 V…-12.6 V	0 A 0 A 0 A 0 A	8.0 A 3.0 A 2.0 A 0.5 A	12 A 4.0 A	7.0 A	1 % 100mV 100mV 100mV	± 3 % ± 3 % ± 5 % ± 5 %	84 %

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

Huomioitavaa – Notes

1. Each output can last for 8 seconds without shut down.
2. 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.
3. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
4. Load regulation is defined by changing ±40% of measured output load from 60% rated load at another output set to 60% rated load.
5. Ripple & noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF + 10uF capacitor at rated load and nominal line.
6. 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.
7. Efficiency is measured at rated load and nominal line.

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