

# 15Watts 3.3V & 5V Dual output Power Supply

## Model No.: NAD-20

### Feature:

- 90 to 264Vac universal input range.
- 3.3V & 5V dual outputs.
- UL, CSA, TUV safety approval.
- EMI/RFI meet VDE & FCC limit B.
- Low cost & compact size.
- Input with inlet socket.

### Specifications: typical at nominal line, full load at 25° C.

Input Specifications:	General Specifications:
<b>Input voltage:</b> 90 to 264Vac	<b>Efficiency:</b> 70% typical at full load
<b>Input Frequency:</b> 47 Hz to 440Hz	<b>Hold-up time:</b> 15ms @ 110Vac full load
<b>Input inrush current:</b> 10A at 115Vac 20A at 230Vac	<b>EMI/RFI:</b> VDE & FCC Class B limits
<b>Earth leakage:</b> 0.2mA max @ 110VAC 0.4mA max @ 230VAC	<b>Dielectric Withstand:</b> Input/output: 4500Vdc Input/Ground: 2500Vdc
<b>Output Specifications:</b>	<b>Safety Approval:</b> UL UL1950 CSA 22.2-234/950 TUV EN60950
<b>Output Rating:</b> Vo1: +5V/0.5A V02: 3.3V/3A	
<b>Line Regulation:</b> $\pm 2\%$ max	<b>Switching frequency:</b> 20kHz
<b>Load Regulation:</b> $\pm 3\%$ max.	<b>Weight:</b> 180g(5.3Oz)
<b>Transient Response:</b> $\pm \%$ max.dev. (Full to half load) 500uSec recovery	<b>MTBF:</b> 100,000hours(MIL-HDBK-217F)
	<b>Environmental Specifications:</b>
<b>Temperature Coefficient:</b> $\pm 0.02\%$ /°C	<b>Operating temperature:</b> 0 to +50°C
<b>Ripple &amp; Noise:</b> 50mVp-p max	<b>Storage temperature:</b> -40 to +85°C
<b>Protections:</b> a. Over current protection b. Over voltage protection c. Over power protection d. Short circuit protection	<b>Humidity:</b> 5 to 95 % RH non-condensing
	<b>Vibration:</b> 2.4G , 5 to 500Hz
	<b>Cooling:</b> Free air convection

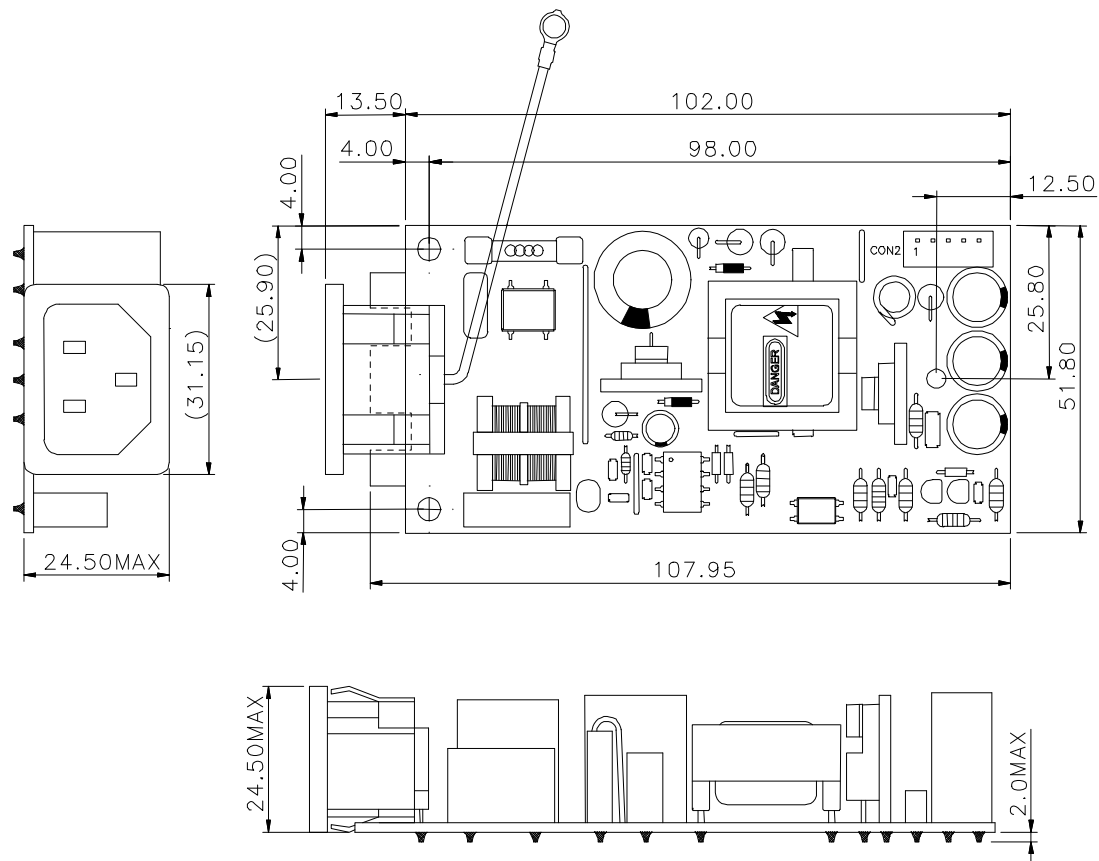
Note:

1. Vibration test: Three orthogonal axes, random vibration, 10 minutes for each axis.
2. Other output voltage versions available. Consult factory for details.
3. At least 20% of load is required to obtain stable regulation.

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**Dimensions:** mm $\pm$ 0.5mm



Pin	FUNCTION	Pin	FUNCTION
1	+5V	4	COM
2	+3.3V	5	COM
3	+3.3V		

- DC output mating connector is JST p/n: XHP-5.