

# 20Watts Dual Output Power Supply

## NAD-201X series

### Feature:

- 90 to 264Vac universal input range.
- UL, CSA, TUV safety approval.
- EMI/RFI meet VDE & FCC limit B.
- Low cost & compact size.
- 20Watts in 110×60×25mm Size.
- 2 Year Warranty.

### 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: 3000VAC Input/Ground: 1500VAC
<b>Output Specifications:</b>	<b>Safety Approval:</b> UL UL1950 CSA 22.2-234/950 TUV EN60950
<b>Output Rating:</b> See Rating Charts	
<b>Line Regulation:</b> ±1% max	<b>Switching frequency:</b> 20Khz
<b>Load Regulation:</b> ±1% max.	<b>Weight:</b> 150g(5.3Oz)
<b>Transient Response:</b> ±1% max dev. (Full to half load) 500uSec recovery	<b>MTBF:</b> 100,000hours(MIL-HDBK-217F)
<b>Temperature Coefficient:</b> ±0.02% /°C	<b>Environmental Specifications:</b>
<b>Ripple &amp; Noise:</b> 1% P-P max	<b>Operating temperature:</b> 0 to +50°C
<b>Protections:</b> a. Over current protection b. Over voltage protection c. Over power protection d. Short circuit protection	<b>Storage temperature:</b> -40 to +85°C
	<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. At least 20% of load is required to obtain stable regulation.
2. Vibration test: Three orthogonal axes, random vibration, 10 minutes for each axis.

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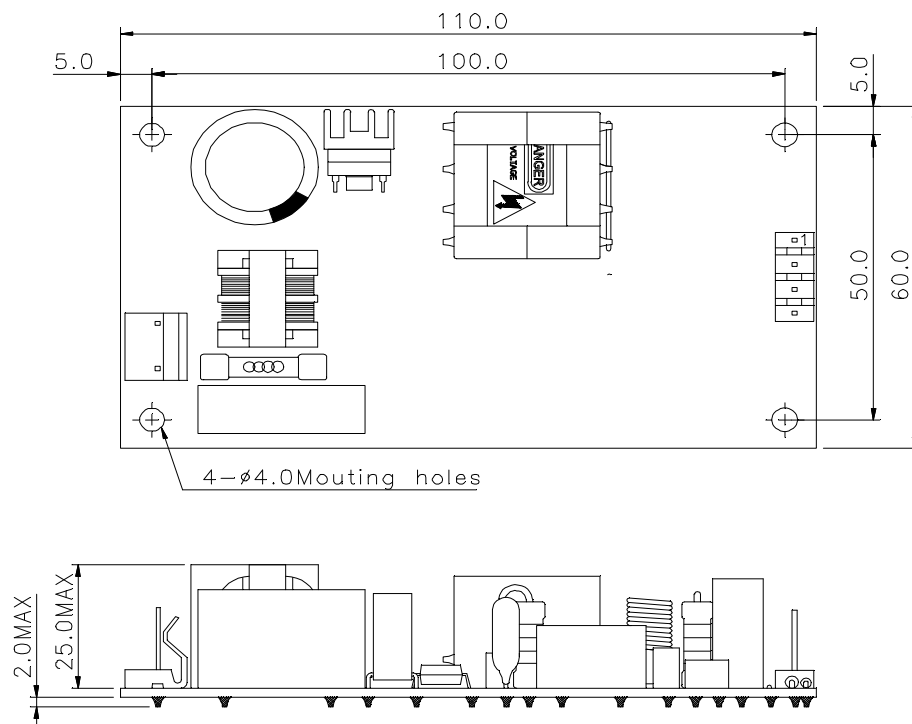
## NAD-201X series

Model No.	Output Voltage Vo1/Vo2	Output Current Typical	Max. Power
NAD-2011	+5V/-5V	+2000mA/-1000mA	20W
NAD-2012	+5V/+12V	+2000mA/+800mA	20W
NAD-2013	+5V/+15V	+2000mA/+600mA	20W
NAD-2014	+5V/+24V	+2000mA/+400mA	20W
NAD-2015	+12V/-12V	+850mA/-850mA	20W
NAD-2016	+15V/-15V	+650mA/-650mA	20W
NAD-2017	+3.3V/+5V	+5000mA/+1000mA	20W

Note:

Other output voltage versions available. Consult factory for details.

### Dimensions: mm±0.5mm



PIN	Function	PIN	Function
1	Vo1	3	COM
2	COM	4	Vo2

- AC mating connector is :LEOCO p/n 3941P03
- DC mating connector is : LEOCO p/n 3986P04