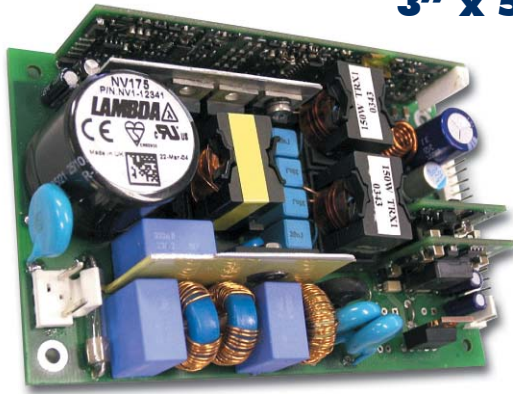


## 3" x 5" 175W Multiple Output Power Supplies



- ◆ Up to 90% Efficient
- ◆ Active Power Factor Correction
- ◆ Universal Input (90 - 264VAC)
- ◆ Up to 5 Outputs
- ◆ No Minimum Loads
- ◆ Medical Approvals

### Key Market Segments & Applications

Broadcast  
 Test & Measurement  
 Medical  
 Industrial Computing and Routers

### Features and Benefits

#### Feature

- ◆ High Efficiency
- ◆ Low Profile
- ◆ Power Factor Corrected
- ◆ No Minimum Loads

#### Benefit

- ◆ Less heat dissipated in system
- ◆ Fits in 1U enclosures
- ◆ Supports Global Use
- ◆ Ease of Use

### Specifications

MODEL		NV175
ITEMS		
Input Voltage range	-	90 - 264VAC (47 - 63Hz, 440Hz with reduced PFC)
Inrush Current	A	<40A at 25C and 264VAC input, Cold Start
Power Factor Harmonics	-	EN61000-3-2 Compliant
Line Regulation	-	< 0.1%
Load Regulation	-	< 1%
Cross Regulation	-	< 0.1% for 100% load change on any output
Ripple & Noise	mV	CH1 & CH2: 50mV, CH3 & CH4: 1%
Efficiency	-	Up to 90%, configuration dependant
Minimum Load	A	None
Overcurrent Protection	-	> 105%
Overvoltage Protection	V	CH1 & CH2, 120-130%, Cycle AC line to reset
Overtemperature Protection	-	Yes
Hold Up Time (Typ)	ms	> 16ms at 90VAC Input
Leakage Current (max)	mA	0.3mA at 264VAC, 63Hz
Remote Sense	-	On Outputs CH1 & CH2, 0.5V compensation maximum
DC Good (Specify N option)	-	CH1 Only, High on Fail (<97% of nominal)
Remote On/Off (Specify N option)	-	TTL logic level low will enable all outputs
Operating Temperature	-	0 to +70°C. Derate linearly to 50% load from 50°C to 70°C(1)
Storage Temperature	-	-40 to +85°C
Humidity (non condensing)	-	5 - 95% RH
Cooling	-	Forced air, 2m/s from input to output
Isolation	-	Input to Ground 2.3kVDC, Input to Output 4.3kVDC, Output to Ground 200VDC
Vibration (non operating)	-	2G, 10-500Hz (sweep & endurance at resonance) in all 3 planes
Shock	-	30G per IEC68-2-27
Safety Agency Approvals	-	UL60950-1, CSA22.2 No 60950-1, EN60950-1, IEC60950-1, CE for LVD, UL2601 EN60601, UL61010-1, EN61010-1, IEC61010
Immunity	-	EN50082-2: EN61000-4-2, -3, -4, -5, -6, -8, -11
Conducted Emissions and Flicker	-	EN55022 Class B (per CISPR.22), EN61000-3-3
Radiated Emissions	-	EN55022 Class A (per CISPR.22)(2)
Weight (Typ)	g	250g
Size	(3) in	3" x 5" x 1.25" (3.7" x 5" x 1.25" for N option version)
Warranty	yrs	Three Years

Notes: (1) -20°C cold start

(2) See application note for Class B

(3) Including underside component leads

## Model Selector

Model	CH1 (Adjustment) (4)	CH2 (Adjustment) (4)	CH3 (Adjustment) (12 - 15V)	CH4 (Adjustment) (Fixed)	CH5 (Adjustment) (5)
NV1453TT	+5V/25A (5 - 5.5V)	+3.3V/15A (0.9 - 3.3V)	+12V/5A (12 - 15V)	-12V/1A (Fixed)	-
NV1453FF	+5V/25A (5 - 5.5V)	+3.3V/15A (0.9 - 3.3V)	+15V/5A (12 - 15V)	-15V/1A (Fixed)	-
NV1452TT	+5V/25A (5 - 5.5V)	+2.7V/15A (0.9 - 3.3V)	+12V/5A (12 - 15V)	-12V/1A (Fixed)	-
NV1452FF	+5V/25A (5 - 5.5V)	+2.7V/15A (0.9 - 3.3V)	+15V/5A (12 - 15V)	-15V/1A (Fixed)	-
NV1350TT	+5V/25A (5 - 5.5V)	-	+12V/5A (12 - 15V)	-12V/1A (Fixed)	-
NV1350FF	+5V/25A (5 - 5.5V)	-	+15V/5A (12 - 15V)	-15V/1A (Fixed)	-
NV1453TTN	+5V/25A (5 - 5.5V)	+3.3V/15A (0.9 - 3.3V)	+12V/5A (12 - 15V)	-12V/1A (Fixed)	+5V/2A (Fixed)
NV1453FFN	+5V/25A (5 - 5.5V)	+3.3V/15A (0.9 - 3.3V)	+15V/5A (12 - 15V)	-15V/1A (Fixed)	+5V/2A (Fixed)
NV1452TTN	+5V/25A (5 - 5.5V)	+2.7V/15A (0.9 - 3.3V)	+12V/5A (12 - 15V)	-12V/1A (Fixed)	+5V/2A (Fixed)
NV1452FFN	+5V/25A (5 - 5.5V)	+2.7V/15A (0.9 - 3.3V)	+15V/5A (12 - 15V)	-15V/1A (Fixed)	+5V/2A (Fixed)
NV1350TTN	+5V/25A (5 - 5.5V)	-	+12V/5A (12 - 15V)	-12V/1A (Fixed)	+5V/2A (Fixed)
NV1350FFN	+5V/25A (5 - 5.5V)	-	+15V/5A (12 - 15V)	-15V/1A (Fixed)	+5V/2A (Fixed)

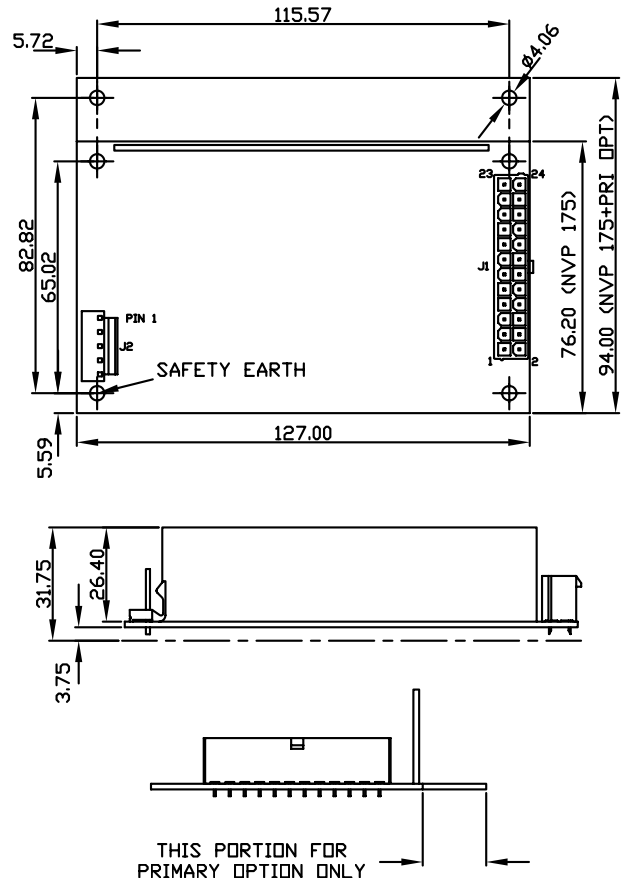
**Notes:**

- (4) Maximum total current from CH1 & CH2 = 25A
- (5) CH5 is a standby Voltage (always On). 2.5A Peak rated

## Pinouts

PIN	Function	PIN	Function
<b>J1</b>			
23	Standby +Vo	24	Standby Return
21	Power Good	22	Remote On/Off
19	CH1 Output	20	CH1 Power Good
17	CH1 Output	18	CH1 Output
15	CH1 Output	16	CH1 Output
13	+Sense CH1	14	-Sense CH1
11	OV Common	12	OV Common
9	OV Common	10	OV Common
7	CH2 Output	8	OV Common
5	CH2 Output	6	CH2 Output
3	+Sense CH2	4	-Sense CH2
1	CH3 Output	2	CH4 Output
<b>J2</b>			
1	Neutral		
2	N/C		
3	Live		
4	N/C		
5	Earth		

## Outline Drawing



## Mating Parts (Molex)

CONN	Housing	Pins
J1	39-01-2245	44476-3112
J2	09-50-8053	08-52-0113

## Other Lambda Industrial Products

NV350	350W 1U Modular Power Supply 1-6 outputs
SC40/60	40 to 80W single, dual & triple 3x5 footprint
ZWS/ZWSPAF	5 to 240W single output power supplies

For Additional Information, please visit  
[www.lambdapower.com/products/nv-series.htm](http://www.lambdapower.com/products/nv-series.htm)