

NV175-M Series

3" x 5" 180-200W Medical Power Supplies

RoHS



- ◆ 1-3 Outputs
- ◆ Up to 90% Efficient
- ◆ Active Power Factor Correction
- ◆ Universal Input (90 - 264VAC)
- ◆ No Minimum Loads
- ◆ Reinforced Insulation Input-Output (4kVAC)

Features and Benefits

Feature	Benefit
◆ High Efficiency	◆ Less heat dissipated in system
◆ Low Profile	◆ Fits in 1U enclosures
◆ Reinforced Insulation (4kVAC input to output)	◆ Suitable for medical applications
◆ No Minimum Loads	◆ Ease of use

Specifications

MODEL		NV175-M
ITEMS		
Input Voltage range	-	90 - 264VAC (45 - 63Hz)
Inrush Current	A	<40A at 25°C and 264VAC input, Cold Start
Power Factor Harmonics	-	EN61000-3-2 Compliant (0.97 typical)
Regulation Total	-	1%; Including Line, Load and Cross regulation
Ripple & Noise	mV	1% or 50mV (Which ever is greater)
Efficiency	-	Up to 90%, configuration dependant
Minimum Load	A	None
Overcurrent Protection	-	>105%
Overvoltage Protection	V	CH1, 120-130%, Cycle AC line to reset
Overtemperature Protection	-	Yes
Hold Up Time (Typ)	ms	>16ms at 90VAC Input
Leakage Current (max) (*)	µA	123µA 120VAC 60Hz, 257µA 240VAC 60Hz, <300µA 264VAC 63Hz (Type Test results)
Remote Sense	-	On Output CH1, 0.5V compensation maximum
DC Good	-	CH1 Only, High on Fail (90% of nominal ±5%)
Peak Power (Single output units)	-	200W (<5 mins. Average power not to exceed 180W)
Operating Temperature (1)	-	0 to +65°C. Derate linearly to 62.5% load from 50°C to 65°C
Storage Temperature	-	-40 to +85°C
Humidity (non condensing)	-	5 - 95% RH
Cooling	-	Forced air, 2m/s from input to output or use -F option
Isolation	-	Input to Ground 2.3kVDC, Input to Output 4kVAC, Output to Ground 200VDC
Vibration (non operating)	-	Conforms to MIL-STD-810E, Method 516.5, Pro I, IV, VI; EN60068-2-6, IEC68-2-6
Shock	-	Conforms to MIL-STD-810E/F, Method 514.4, Pro I, Cat 1,9; EN60068-2-27, EN60068-2-47, IEC68-2-47, IEC68-2-47, JIS C0041-1987
Safety Agency Approvals	-	UL60950-1, CSA22.2 No 60950-1, EN60950-1, IEC60950-1, CE for LVD, UL60601-1, IEC60601-1, EN60601-1, EN61010-1, IEC61010-1
Immunity	-	EN61000-6-2:2001, EN61000-4-2, -3, -4, -5, -6, -8, -11
Conducted Emissions and Flicker	-	EN55011, EN55022 Class B (per CISPR.22), EN61000-3-3
Radiated Emissions (2)	-	EN55011, EN55022 Class B (per CISPR.22)
Weight (Typ)	g	250g
Size (without cover) (3)	in	3" x 5" x 1.3"
Warranty	yrs	Three Years

(1) -20°C cold start

(2) See application note for Class B

(3) Including underside component leads

(*) Lower leakage versions available - contact factory

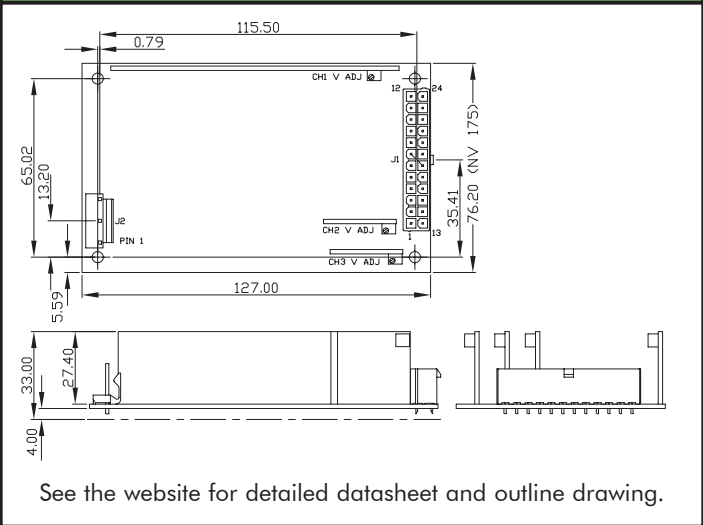
NV175-M Series

Stocked Models Quick Selector

Model	CH1 (4)	CH2 (4)	CH3
NV1-1T000-M	12V/15A	-	-
NV1-1G000-M	24V/7.5A	-	-
NV1-3G0TT-M	24V/7.5A	12V/5A	-12V/1A
NV1-3G0FF-M	24V/7.5A	15V/5A	-15V/1A

Notes:
 (4) 12 - 12.5V if 24V CH3 is fitted.
 (5) 14.5 - 15V if 24V CH3 is fitted.
 (6) 24 - 26V if 24V CH3 is fitted.
 (7) 1.5A max if -F is specified.

Outline Drawing



Built to Order Model Selector

CH1	CH1 Code	Adjust. Range	CH2	CH3	CH3 Code	Adjust. Range	CH4	CH4 Code	Adjust. Range
+12V / 15A +15V / 12A +24V / 7.5A	T F G	12 - 15V (4) 12 - 15V (5) 24 - 28V (6)	Not available	+12V / 5A +15V / 5A +24V / 2.5A No output	T F G 0	12 - 15V 12 - 15V 18 - 24V -	-12V / 1A -15V / 1A +3.3V / 2A (7) +5V / 2A (7) -12V / 2A (7) -15V / 2A (7) Fan Supply only No output	T F 3HP 5HP TH FH OH 0	Fixed Fixed Fixed Fixed Fixed Fixed
				Add "Y" to code for negative polarity output	Add "Y" to code for negative polarity output		Add "P" to code for positive polarity output	Add "P" to code for positive polarity output	

How to Create a Model Number

NV1-	Enter number of outputs	CH1 Code	0	CH3 Code	CH4 Code	Case Option	-M	Connector Options
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No Case	Blank	Blank	Vertical
U Chassis	U	R	Horizontal
U Chassis with Cover	C		
U Chassis, Cover and Fan*	F		
U Chassis, Cover and Fan* and IEC inlet	I		

* A high output CH3 (3H, 5H, TH, FH) or fan supply OH must be selected to provide fan option.

Example

NV1 3 G 0 TY 5HP C -M -R

Description: Triple output, 24V/7.5A, -12V/5A, +5V/2A, U Chassis with cover, Horizontal Connector

Mating Parts (Molex)

CONN	Housing	Pins
J1	39-01-2245	44476-3112
J2	09-50-8051	08-52-0113

Other Lambda Medical Products

NV350, 700	350-968W 1U Modular Power Supply 1-6 outputs
Vega	450-900W Modular Power Supply
HWS/ME	30-1500W Single Output Power Supply

For Additional Information, please visit
us.tdk-lambda.com/lp/products/nv-series.htm