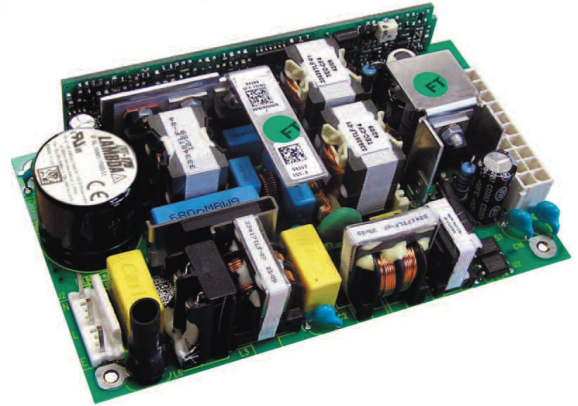


3" x 5" 180W Power Supplies

Features

- ◆ Reinforced Input to Output Isolation for IEC60601
- ◆ Very low Earth Leakage and Class B EMC
- ◆ Medical Approval (Designed for BF applications)
- ◆ Standby supply and remote on/off
- ◆ High Efficiency (90%) & High Power Density (9.3 W/in³)
- ◆ Fits 1U applications
- ◆ Dual Fusing



Key Market Segments & Applications



Specifications		
Model	NVM-175	
Input Voltage range	V	90 - 264VAC (45 - 63Hz)
Inrush Current	A	<40A at 25C and 230VAC input, Cold Start
Power Factor Harmonics	-	EN61000-3-2 Compliant, 0.97 typical
Total Regulation	-	1% Including full line & load changes
Ripple & Noise	mV	1% or 50mV (which ever is greater)
Turn on time	-	1.5s max at 90VAC & 100% rated output power
Efficiency	%	Up to 90%
Minimum Load	A	None
Short circuit protection	-	Yes
Overvoltage Protection	V	120-135% of output, recycle input to reset
Overtemperature Protection	-	Yes
Hold Up Time (Typ)	ms	>16ms at 90VAC input
Leakage Current (max)	µA	80mA max at 120VAC (60Hz), 200µA at 264VAC (63Hz)
Remote Sense	-	Main output - 0.5V compensation maximum
Power good signal	-	Logic "High" signal indicates AC supply is good and output is within regulation. Provides minimum 4ms AC fail warning.
Remote On/Off	-	Yes, see options in model selector
Operating Temperature	°C	0 to +70°C. Derate by 2.5% per °C from 50°C to 70°C ⁽¹⁾ .
Storage Temperature	°C	-40°C to +85°C (max 12 months)
Humidity (non condensing)	-	5 - 95% RH
Cooling	-	Forced air required, 2m/s (10CFM) blown from input to output
Isolation	-	Input to Output 4.5kVAC (Reinforced) ⁽²⁾ , (2 x MOPPs (3rd edition 60601)), Input to Ground 1.5kVAC (Basic), Output to Ground 1.5kVAC
Vibration (non operating)	-	MIL-STD810E, Method 516.5, Pro I, IV, VI. 2G, 10 - 500Hz
Shock	-	MIL-STD-810E/F, Method 514.4, Pro 1, Cat 1, 30G per IEC68-2-27
Safety Agency Approvals	-	UL/CSA/IEC/EN 60950-1, UL/CSA/IEC/EN 60601-1, ANSI/AAMI ES60601-1, CE Mark
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11
Conducted Emissions & Flicker	-	EN55022 Class B (per CISPR.22), EN61000-3-3
Radiated Emissions	-	EN55022 Class B (per CISPR.22)
Weight (Typ)	g	TBA
Size	mm	3" x 5" x 1.02" ; Covered option 3.3" x 5" x 1.6"
Warranty	yrs	Three Years

(1) -20°C cold start

(2) Type tested to 4.5 kVAC (equivalent to 6.3 kVDC). Production tested to 4.3kVDC.

How to Create a Model Number

T	12V/15A
G	24V/7.5A

-S1	12V/0.2A standby, power good, logic level low enables main output
-S2	12V/0.2A standby, power good, logic level high enables main output

no case	Blank
U chassis + cover	-C
U chassis	-U

NVM1-1	Vout	000	Global Signal	Case Option	Connector Option
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Standard vertical connector	Blank
Right angled connector (see handbook for "R" connection and mechanical details)	-R

Stocked Models Quick Selector

Product Code	Part Desc.	Main	Standby	Remote on/off
NVM100015	NVM1-1T000-S1	12V/15A	12V/0.2A	Signal level low = enable
NVM100026	NVM1-1G000-S1	24V/7.5A	12V/0.2A	Signal level low = enable

Outline Drawing

Top View NVM175 Models

Top View NVM175-C Models

Side View NVM175-C & NVM175-U Models

Bottom View NVM175-C & NVM175-U Models

Output Connector J1

Pin	Function	Pin	Function
10	standby +ve	20	standby -ve
9	Power good	19	Remote on/off
8	+V output	18	Do not connect
7	+V output	17	+V output
6	+V output	16	+V output
5	+ Sens e	15	- Sense
4	0V (DC return)	14	0V (DC return)
3	0V (DC return)	13	0V (DC return)
2	Do not connect	12	0V (DC return)
1	Do not connect	11	Do not connect

Mating Parts (Molex or equivalent)

Conn	Housing	Pins
J1	39-01-2205	44476-3112
J2	09-50-8051	08-52-0113

Other Medical Products

NV175M	180W, 1U, 3.3V-28V output voltages, 3" x 5", Reinforced isolation, 1-3 outputs
NV175	175/180W, 1U, 0.9V-28V output voltages, 3" x 5", 1-5 outputs
EFE300M	300W, 1U, 12V-48V output voltage, 6" x 3", BF rated, single output
NV300	300W, 1U, 0.9V-28V output voltages, 7.25" x 3.75", 1-5 outputs
NV350-700	350-1150W, 1U, 3.2V-52.8V output voltages, 1-8 outputs
Vega	450-900W, 0.5V-62V seamless output voltages, 1-11 outputs
KM	15 to 40W, pcb mount, 3.3V-24V output voltages, ClassII, 1-3 outputs
CSS65, 150	65W or 150W, 5V-48V output voltages, open frame, single output
Alpha 1000	1000W, 1.8V-48V output voltages, 1-14 outputs
SWS1000L	1000W 3.3V-60V output voltages, single output

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



For other TDK-Lambda Medical Products,
 visit our Medical Webpage at
us.tdk-lambda.com/lp/products/medical.htm

