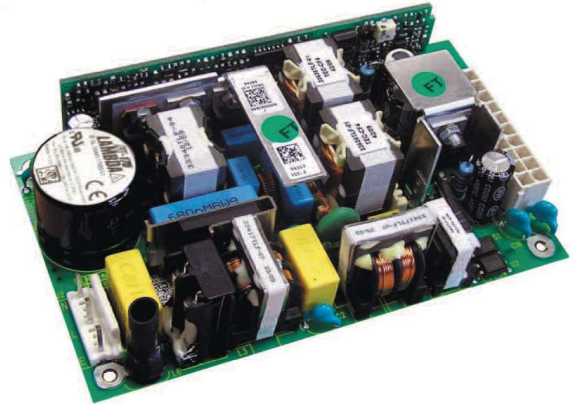


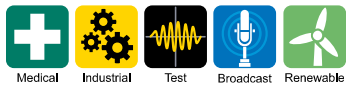
3" x 5" 180W Power Supplies

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 | 80µA 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 |
|--------|------|-----|---------------|-------------|------------------|

| | |
|---|-------|
| 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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TDK-Lambda:](#)

[NVM100015](#) [NVM100026](#)