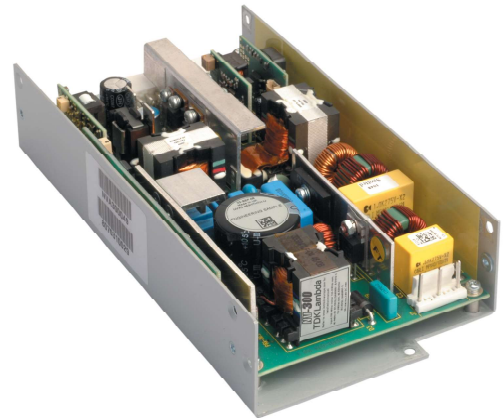


3.75" x 7.25" 300W Power Supplies

Features

- ◆ Medical Safety Certifications
- ◆ Universal Input (90 - 264VAC)
- ◆ Up to 5 Outputs (including standby)
- ◆ No Minimum Loads
- ◆ High Efficiency
- ◆ Low Profile



Key Market Segments & Applications



| Specifications | | |
|---------------------------------|---------------------------|--|
| Model | NV300 (300W Output Power) | |
| Input Voltage range | - | 90 - 264VAC (45-63Hz, 440Hz with reduced PFC) |
| Inrush Current | A | <15A at 25C and 264VAC input, Cold Start |
| Power Factor Harmonics | - | EN61000-3-2 Class A Compliant, 0.97 typical |
| Total Regulation | - | CH1-3: 1.5%, CH4: 2.5% |
| Ripple & Noise | mV | 1% or 50mV (whichever is the greater) |
| Efficiency | - | Up to 90%, configuration dependant |
| Minimum Load | A | None |
| Overcurrent Protection | - | Yes |
| Overvoltage Protection | V | Yes, see application notes for details |
| 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 result) |
| Remote Sense | - | On Outputs CH1 & CH2, 0.5V Maximum compensation |
| DC Good | - | Logic low signal indicates CH1 is within regulation |
| Remote On//Off | - | TTL logic level high (or open) will inhibit all outputs (except standby) |
| Operating Temperature (1) | - | 0 to +70°C. Derate linearly to 50% load from 50°C to 70°C |
| Storage Temperature | - | -40 to +85°C |
| Humidity (non condensing) | - | 5 - 95% RH |
| Cooling | - | Forced air 2m/s from input to output, unless internal temperature controlled fan is specified |
| Isolation | - | Input to Ground 2.25kVDC, Input to Output 4.3kVDC, 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, -2-47, IEC68-2-27, -2-47, JIS C0041-1987 |
| Safety Agency Certifications | - | UL/CSA/IEC/EN 60950-1, UL/CSA/IEC/EN 60601-1, ANSI/AAMI ES60601-1; IEC/EN 61010-1 ⁽³⁾ ; CE Mark |
| Immunity | - | EN50082-2: EN61000-4-2, -3, -4, -5, -6, -8, -11, -14 |
| Conducted Emissions and Flicker | - | EN55011, EN55022 Class B (per CISPR.11/22), EN61000-3-3 |
| Radiated Emissions | - | EN55011, EN55022 Class B (per CISPR.11/22) |
| Weight (Typ) | g | 470 |
| Size (pcb version) (2) | in | 3.75 x 7.25 x 1.34 (4.72 x 7.25 x 1.34 for N option version) |
| Warranty | yr | Three Years |

Notes:

- (1) -20°C cold start
- (2) Including underside component leads
- (3) Designed to meet 61010-1

Last time buy July 2019

Stocked Models Quick Selector

| Part Number | Description | CH1 (4) | CH2 (4) | CH3 | CH4 | CH5 Stand By (3) | Global Option Type |
|-------------|----------------|---------|----------|---------|---------|------------------|--------------------|
| NVA30152P | NVA3-350TTH | +5V/40A | - | +12/5A | -12V/2A | - | - |
| NVA30166W | NVA3-350FFH | +5V/40A | - | +15V/5A | -15V/2A | - | - |
| NVA30042H | NVA3-453TTH | +5V/40A | 3.3V/15A | +12/5A | -12V/2A | - | - |
| NVA30135N | NVA3-453FFH | +5V/40A | 3.3V/15A | +15V/5A | -15V/2A | - | - |
| NVA30168Y | NVA3-350TTH-N3 | +5V/40A | - | +12/5A | -12V/2A | +5V/2A | ATX (-N3) |
| NVA30167X | NVA3-350FFH-N3 | +5V/40A | - | +15V/5A | -15V/2A | +5V/2A | ATX (-N3) |
| NVA30103D | NVA3-453TTH-N3 | +5V/40A | 3.3V/15A | +12/5A | -12V/2A | +5V/2A | ATX (-N3) |
| NVA30170R | NVA3-453FFH-N3 | +5V/40A | 3.3V/15A | +15V/5A | -15V/2A | +5V/2A | ATX (-N3) |

Notes:

(3) CH5 is a standby voltage (always on)

Built to Order Model Selector

| CH1 | CH1 Code | Adjust. Range ⁽⁵⁾ | CH2 | CH2 Code | Adjust. Range | CH3 | CH3 Code | Adjust. Range | CH4 ⁽²⁾ | CH4 Code ⁽²⁾ | Adjust. Range |
|--------------------------|----------|------------------------------|-------------|----------|---------------|---|------------------------------|---|---|---------------------------------|--|
| +5V / 40A ⁽¹⁾ | 5 | 5 - 5.5V | +1.8V / 15A | 1 | 0.9 - 2.5V | +12V/5A ⁽⁴⁾ +12V/8A ⁽⁶⁾ +15V/4A ⁽⁴⁾ +15V/6.4A ⁽⁶⁾ +24V/2.5A Omit | T TH F FH G 0 | 12 - 15V 12 - 15V 12 - 15V 12 - 15V 18 - 24V - | -3.3V / 2A ⁽³⁾ -5V / 2A ⁽³⁾ -12V / 2A ⁽³⁾ -15V / 2A ⁽³⁾ Fan supply only Omit | 3H 5H TH FH 0H 0 | Fixed Fixed Fixed Fixed Fixed Fixed |
| | | | +2.7V / 15A | 2 | 2.5 - 3.8V | | | | | | |
| | | | +3.3V / 15A | 3 | 2.5 - 3.8V | | | | | | |
| | | | +2.7V / 24A | 2H | 2.5 - 3.8V | | | | | | |
| | | | +3.3V / 24A | 3H | 2.5 - 3.8V | | | | | | |
| +12V / 25A | T | 12 - 13V | +5V / 10A | 5 | 3.3 - 5.5V | Omit | 0 | - | | | Fixed |
| | | | +5V / 16A | 5H | 3.3 - 5.5V | | | | | | |
| 24V / 12.5A | G | 24 - 28V ⁽⁸⁾ | +5V / 8A | 5 | 5 - 5.5V | | | | | | |
| | | | +5V 12.5A | 5H | 5 - 5.5V | | | | | | |
| | | | +12V 10A | T | 12 - 15.5V | | | | | | |
| | | | +15V 10A | F | 12 - 15.5V | | | | | | |
| | | | Omit | 0 | - | | | | | | |

How to Create a Model Number

| | | | | | | | | |
|-------|-------------------------|----------|----------|----------|----------|---------------|-------------|---|
| NVA3- | Enter number of outputs | CH1 Code | CH2 Code | CH3 Code | CH4 Code | Global Option | Case Option | Other output voltages are available, contact factory. |
|-------|-------------------------|----------|----------|----------|----------|---------------|-------------|---|

| | | | |
|--|-------|-------|--|
| No option | Blank | Blank | No case |
| AC Fail, CH1 DC Good, Remote On/Off, +5V / 2A standby | -N3 | U | U Chassis |
| AC Fail, CH1 DC Good, Remote On/Off, +12V / 1A standby | -N4 | C | U Chassis with Cover |
| | | F | End fan, U chassis & cover ⁽⁷⁾ |
| | | I | IEC input, end fan, U chassis & cover ⁽⁷⁾ |

Note:

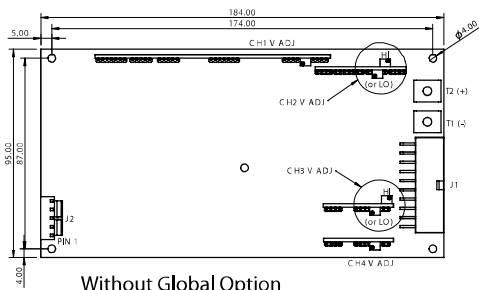
- (1) Maximum combined current from CHs 1 & 2 = 40A
- (2) Add 'P' suffix to code for positive output (ex. 3HP)
- (3) 1.5A maximum if used with "-F" option
- (4) 60W maximum output power
- (5) Maximum output voltage (includes remote sense)
- (6) 96W maximum output power
- (7) CH4 code of 3H, 5H, TH, FH or 0H must be used
- (8) 24 - 24.5V if CH2 = 5V, 24 - 26V if CH3 = 24V

Example

NVA3-353G0H-N3F

Description: Triple output, 5V/40A, 3.3V/15A, 24V/2.5A, Global Option (N3), cover & fan (F).

Outline Drawing



Without Global Option

Other Industrial Products

NV175, 350, 700 175W to 700W 1U power supplies
HWS 15 to 1500W single output power supplies

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



Last time buy July 2019

See the website for detailed datasheet and outline drawing.