

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

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	-	-	0	Fixed
			+5V / 16A	5H	3.3 - 5.5V						
			Omit	0	-						
24V / 12.5A	G	24 - 28V ⁽⁸⁾	+5V / 8A	5	5 - 5.5V	Omit	0	-	-	-	-
			+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 AC Fail, CH1 DC Good, Remote On/Off, +5V / 2A standby AC Fail, CH1 DC Good, Remote On/Off, +12V / 1A standby					Blank -N3 -N4	Blank U C F I	No case U Chassis U Chassis with Cover End fan, U chassis & cover ⁽⁷⁾ IEC input, end fan, U chassis & cover ⁽⁷⁾

Note:

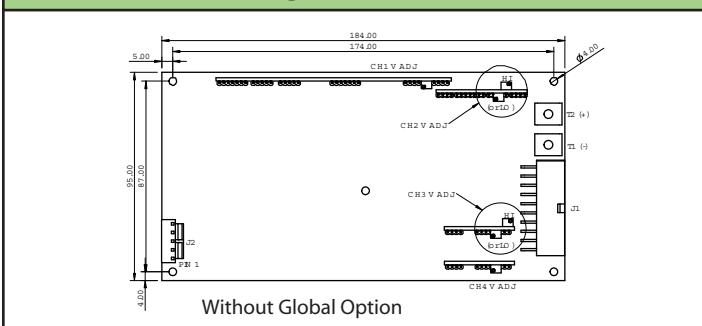
- (1) Maximum combined current from CHs 1 & 2 = 40A
- (2) Add 'P' suffix to code for positive output (ex. 3HP)
- (3) 1.5A maximum if used with "-F" option
- (4) 60W maximum output power
- (5) Maximum output voltage (includes remote sense)
- (6) 96W maximum output power
- (7) CH4 code of 3H, 5H, TH, FH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



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



See the website for detailed datasheet and outline drawing.