350W Front End Power Supplies

Features

- 1U Form Factor
- Up to 90% Efficient
- Active Power Factor Correction
- Universal Input (90 - 264VAC)
- Designed for Distributed Power
- Medical Approvals

Key Market Segments & Applications

Medical Industrial Test Broadcast

RoHS

Specifications

Model		NV350-FEP
Input Voltage range	-	90 - 264VAC (47 - 63Hz, 440Hz with reduced PFC)
Inrush Current	A	<15A at 25°C and 264VAC input, Cold Start
Power Factor Harmonics	-	EN61000-3-2 Compliant
Line Regulation	-	< 0.1% for 90-264VAC input change
Load Regulation (max)	-	For 0-100% load change, Ch1: 1%; Ch2: 2%
Ripple & Noise	mV	<1%
Efficiency (typical)	-	90%
Minimum Load	A	None
Overcurrent Protection	-	110 - 150%, hiccup mode (Primary limited)
Overvoltage Protection	V	15-16V Cycle AC line to reset (Output 1 only)
Overtemperature Protection	-	Yes, recycle AC to reset
Hold Up Time (Typ)	ms	>16ms at 90VAC Input
Leakage Current (max)	mA	300µA max at 264VAC, 63Hz
Remote Sense	-	Ch1 only. Compensates for 0.5V total line drop
AC Good (Specify as option)	-	High on fail
Operating Temperature	-	0 to +70°C. Derate linearily to 50% load from 50°C to 70°C[1]
Storage Temperature	-	-40° to +85°C
Humidity (non condensing)	-	5 - 95% RH
Cooling	-	Internal fan or 1m/s from input to output with system supplied air
Isolation	-	Input to Ground 2.3kVDC, Input to Output 4.3kVDC, Output to Ground 200VDC
Vibration (non operating)	-	2G, 10-500Hz (sweep & endurance at resonance) in all 3 planes
Shock	-	30G per IEC68-2-27
Safety Agency Approvals	-	UL60950-1, CSA22.2 No 60950-1, EN60950-1, IEC60950-1, CE for LVD, EN60601-1, IEC60601-1, EN61010-1, IEC61010-1
Immunity	-	EN50082-2: EN61000-4-2, -3, -4, -5, -6, -8, -11
Conducted Emissions and Flicker	-	EN55022 Class B (per CISPR.22), EN61000-3-3
Radiated Emissions	-	EN55022 Class B (per CISPR.22)[2]
Weight (Typ)	g	800g (configuration dependent)
Size	in.	1.6 x 3.75 x 9.15" (includes fan)
Warranty	yrs	Three Years

Notes:
(1) -20°C cold start
(2) See application note for Class B

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1. Configuration Guide

Chose your options for boxes A through D.

			A	B	C	D
Output Power	NF3	350W	NV3	S	S	S	ES5V
Cooling	S R C	Forward air Reverse air Customer air - no fan[1]				
Input Connection	S I	Screw IEC320[2]				
Leakage Current	S	Standard 0.3mA	(max leakage current at 264VAC, 63Hz)			
Primary Option	ES5V ES12V IS5V IS12V	AC good, PSU enable, 5V/2A standby AC good, PSU enable, 12V/1A standby AC good, PSU inhibit, 5V/2A standby AC good, PSU inhibit, 12V/1A standby				

1 - Thermocoupled sample recommended to ensure adequate cooling - consult sales
2 - Not with customer air cooling

2. Output Section

Select Output Module from the table below.
Example: If you require 12V/29A with enable option and 5V standby, select FE module and prefix with output voltage (e.g. 12FE), and primary option ES5V.
This will create a complete product description (e.g. NF3SSSES5V 12FE) which represents a three output NV350-FEP with: Forward Air, Screw Input Terminals, 0.3mA Leakage, AC Good, PSU Enable and 5V Standby.
Output 1 = 12V/29.2A
Output 2 = 12V/0.5A
Output 3 = 5V/2A (Standby)
Maximum 350W continuous output power.

2. Output Section

Module Code = FE						
Channel 1			Channel 2			Maximum
Voltage Range	Maximum Current	Maximum Power	Output Voltage	Maximum Current	Maximum Power	Output Power
11.5-13.2V	29.2A	350W	12V[3]	0.5A	6W	350W

(3) Output set accuracy: ±5%

Other Products

NV175, 350	1U Power Supply 1-5 outputs
Vega 450, 650, 900	450 to 900W Modular Power Supply 1-10 outputs
Alpha 1000, 1500	1000W to 1500W Modular Power Supply 1-16 outputs

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

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