

# 1000HN series

8 to 10 watts



## Key Features:

- *Unencapsulated construction*
- *Single & Dual Output Models*
- *2:1 and 4:1 Input Voltage Range Models*
- *Industry Standard 1" x 2" x 0.375" Footprint*

## Ideally Suited For:

- *Telecom equipment*
- *Mixed analog/digital subsystems*
- *Distributed power networks*

## Input Characteristics

Input Voltage Range:	9-18, 9-36, 18-75 VDC
Input Under Voltage Shutdown	8V (9-18), 8V (9-36), 16V (18-75) VDC
Input Filtering:	L-C Network
Efficiency:	See Available Models Chart
No Load Input Current:	10mA

## Output Characteristics

Output Voltage Accuracy:	+/- 1%
Output Voltage Adjustment:	N/A
Total Error Band:	+/-2% Max. (Singles), +/-3% Max. (Duals)
Voltage Balance:	+/-2%, Dual Output Models only
Minimum Load Requirements:	0% (Single Output), 10% (Dual Output)
Line Regulation:	+/-0.5% Low Line to High Line
Load Regulation:	+/-0.5% (Singles), +/-1.0% (Duals) Min Load to Full Load
Ripple and Noise:	50mV or 1% pk-pk, 20MHz Bandwidth
Transient Response/Recovery Time:	200µS, 25% Load Step
Temperature Coefficient:	+/-0.02% / °C
Short Circuit Protection:	Continuous (Hiccup Mode)
Over Voltage Protection:	Standard

## Environmental Characteristics

Operating Temperature Range (Ambient):	-40°C to +85°C, See 1000HN Series Data Sheet for Derating curves.
Storage Temperature Range:	-55°C to +125°C
Maximum Case Temperature:	105°C Baseplate
Humidity:	Up to 95%, Non-condensing
Vibration:	5Grms, 5Hz to 2KHz
Reliability (MTBF per Mil-HDBK-217):	>1.46 million hours, +25°C, Ground Benign
Demonstrated MTBF:	>5 million hours at +40°C

## General Characteristics

Switching Frequency:	400KHz, Fixed
Isolation (Input to Output):	1500VDC minimum (1 minute)
Isolation Capacitance:	1200pF
Weight:	0.57 oz (16g)
Case Material:	Aluminum baseplate with black anodized aluminum case
Agency Approvals	UL, CSA, TUV and CE (LVD, 48 Vin Models)

## Additional Features

Remote Shutdown (Designated by optional "-R" suffix)	
Supply On:	Open or >3.5 VDC
Supply Off:	<0.8 VDC

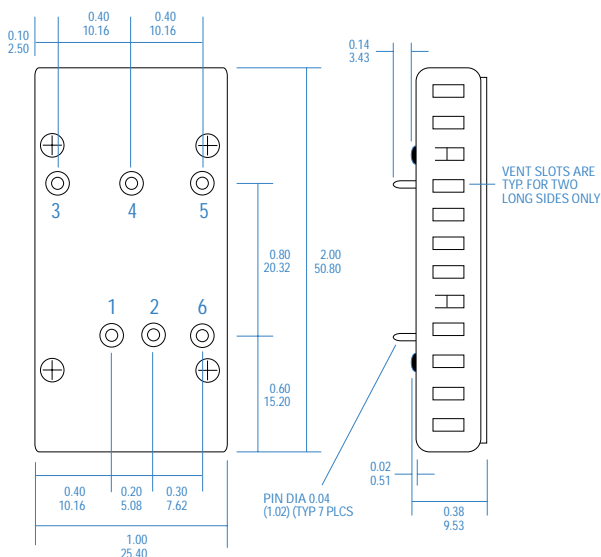


## Available Models

Model	Nominal Input Voltage (VDC)	Input Voltage Range (VDC)	Output Voltage (VDC)	Max. Output Current (mA)	Efficiency @ Full-Load (%)
1003S12HN	12	9-18	3.3	2400	76
1005S12HN	12	9-18	5.0	2000	80
1012S12HN	12	9-18	12.0	833	82
1015S12HN	12	9-18	15.0	667	83
1005D12HN	12	9-18	+/-5.0	+/-1200*	80
1012D12HN	12	9-18	+/-12.0	+/-600*	82
1015D12HN	12	9-18	+/-15.0	+/-500*	83
1003S24HN	24	9-36	3.3	2200	77
1005S24HN	24	9-36	5.0	1600	81
1012S24HN	24	9-36	12.0	667	82
1015S24HN	24	9-36	15.0	533	83
1005D24HN	24	9-36	+/-5.0	+/-1000*	81
1012D24HN	24	9-36	+/-12.0	+/-500*	83
1015D24HN	24	9-36	+/-15.0	+/-400*	83
1003S48HN	48	18-75	3.3	2400	78
1005S48HN	48	18-75	5.0	2000	82
1012S48HN	48	18-75	12.0	833	86
1015S48HN	48	18-75	15.0	667	87
1005D48HN	48	18-75	+/-5.0	+/-1200*	82
1012D48HN	48	18-75	+/-12.0	+/-600*	83
1015D48HN	48	18-75	+/-15.0	+/-500*	84

\*Total output power not to exceed 10W (8W for 24Vin models).

## Outline Drawing



## Pinout Chart

Pin	Single	Duals
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	COMMON
5	-Vout	-Vout
6	*REMOTE ON/OFF	*REMOTE ON/OFF

\* OPTIONAL - PRESENT ON -R MODELS ONLY

All specifications are typical at 25 degrees C with nominal input voltage and full output unless otherwise noted. Specifications are subject to change without notice. All dimensions are typical.