

Key Features:

- *Unencapsulated construction*
- *Single & Dual Output Models*
- *Industry Standard 1" x 2" x 0.4" Footprint*

Ideally Suited For:

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

Input Characteristics

Input Voltage Range:	9-18, 18-36, 36-75 VDC
Input Under Voltage Shutdown	8V (9-18) , 16V (18-36), 33V (36-75)
Input Filtering:	L-C Network
Efficiency:	<i>See Available Models Chart</i>
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, <i>See 1500HN Series Data Sheet for Derating curves.</i>
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:	1.09 oz (32g)
Case Material:	Aluminum baseplate with black anodized aluminum case
Agency Approvals	UL, CSA, TUV and CE (LVD, 48 Vin Models)

Additional Features

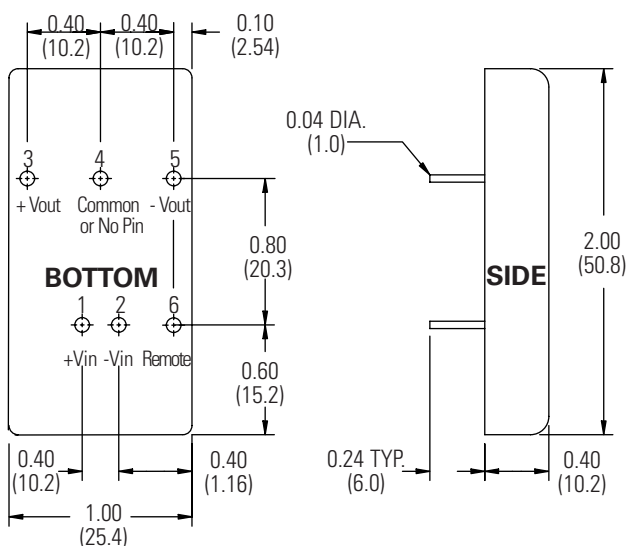
Remote Shutdown (Designated by optional "-R" suffix)	
Supply On:	Open or >3.5 VDC
Supply Off:	<0.8 VDC

Available Models

Model	Nominal Input Voltage (VDC)	Input Voltage Range (VDC)	Output Voltage (VDC)	Max. Output Current (mA)	Efficiency @ Full-Load (%)
1503S12HN	12	9-18	3.3	3000	78
1505S12HN	12	9-18	5.0	2400	80
1512S12HN	12	9-18	12.0	1000	84
1515S12HN	12	9-18	15.0	800	85
1505D12HN	12	9-18	+/-5.0	+/-1500*	82
1512D12HN	12	9-18	+/-12.0	+/-650*	84
1515D12HN	12	9-18	+/-15.0	+/-500*	85
1503S24HN	24	18-36	3.3	3500	78
1505S24HN	24	18-36	5.0	3000	80
1512S24HN	24	18-36	12.0	1250	84
1515S24HN	24	18-36	15.0	1000	85
1505D24HN	24	18-36	+/-5.0	+/-1800*	82
1512D24HN	24	18-36	+/-12.0	+/-750*	84
1515D24HN	24	18-36	+/-15.0	+/-600*	85
1503S48HN	48	36-75	3.3	3500	80
1505S48HN	48	36-75	5.0	3000	84
1512S48HN	48	36-75	12.0	1250	88
1515S48HN	48	36-75	15.0	1000	90
1505D48HN	48	36-75	+/-5.0	+/-1800*	84
1512D48HN	48	36-75	+/-12.0	+/-750*	87
1515D48HN	48	36-75	+/-15.0	+/-600*	88

*Total output power not to exceed 15W (12W for 12Vin 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.