

UP TO 19.5 WATTS - N SERIES

Highly Efficient, Unregulated

FEATURES

- ◆ Industry Standard Package and Pin-Out
- ◆ Low Profile Package
- ◆ Power fold back short circuit protection
- ◆ High Operating Efficiency
- ◆ 500VDC I/O isolation
- ◆ Low Output Ripple and Noise
- ◆ Five Year Warranty



THE N SERIES FROM WALL INDUSTRIES

The N Series of single and dual output DC/DC converters features a low profile package of 2.0" x 2.0" x 0.4" with output power up to 19.5 watts. Other key features of the N Series are its Pi-input filter, low output ripple/noise, short circuit protection, 500VDC input/output isolation, and 83% efficiency.

SPECIFICATIONS: N SERIES

All specifications apply @ +25 C ambient unless otherwise noted.

INPUT SPECIFICATIONS

Input Voltages	5, 12, 24, 48VDC $\pm 10\%$
Input Reflected Ripple (P-P)	$\leq 10\% I$ in DC
Input Voltage Tolerance	$\pm 10\%$
Input Filter	Pi Input Filter

OUTPUT SPECIFICATIONS

Output Current	see table
Output Voltage Tolerance	$\pm 3\%$ nominal
Line Regulation	1.2%/1% V_{in} (5V $_{out}$ - 1.5%/1% V_{in})
Load Regulation	$\pm 10\%$ between 10 to 100% load
Short Circuit Protection	Power fold back
Ripple/Noise (20MHz BW)	$\leq 100mV$ P-P

GENERAL SPECIFICATIONS

Efficiency	83% typical
Isolation Voltage (input to output)	500VDC min.
Isolation Resistance (input to output)	500M Ω
Switching Frequency	60kHz typical

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-25 to +85°C (case)
Storage Temperature	-55 to +100°C
Humidity (non-condensing)	20 - 95% R.H.
Cooling	Free Air Convection

PHYSICAL SPECIFICATIONS

Weight	1.8 oz.
Dimensions	2.0 x 2.0 x 0.4"
Case Material	Non-metallic case

Due to advances in technology, specifications subject to change without notice.

Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Output Power (Watts)	Model Number (with Center Pin-out)	Model Number (with Standard pin-out)
5 VDC	5	750	3.75	NCS55-750	N5S5-750
	10	600	6.0	NCS10-600	N5S10-600
	12	600	7.2	NCS12-600	N5S12-600
		800	9.6	NCS12-500	N5S12-800
		500	7.5	NCS15-500	N5S15-500
	± 12	300	7.2	NCD512-300	N5D12-300
		400	9.6	NCD512-400	N5D12-400
	± 15	300	9.0	NCD515-300	N5D15-300
		400	12.0	NCD515-400	N5D15-400
12VDC	12	500	6.0	NCS1212-500	N12S12-500
	24	400	9.6	NCS1224-400	N12S24-400
	± 12	500	12.0	NCD1212-500	N12D12-500
		650	15.6	NCD1212-650	N12D15-650
	± 15	500	15.0	NCD1215-500	N12D15-500
		650	19.5	NCD1215-650	N12D15-650
18 VDC	36	500	18	NCS1836-500	N18S36-500
24 VDC	5	1300	6.5	NCS245-1300	N24S5-1300
		3600	18.0	NCS245-3600	N24S5-3600

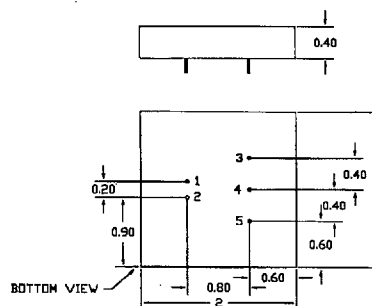
PIN CONNECTIONS

	Single	Dual
1	+ Vin	+ Vin
2	- Vin	- Vin
3	+ Vout	+ Vout
4	N/C	Common
5	- Vout	- Vout

Notes:

1. All case and pin to case dimensions reference only unless otherwise noted.
2. PC Pins: 0.04" diameter x 0.20" long (min.); typical five places.
3. Pin to pin tolerance: ± 0.01 ". Pin Diameter tolerance: ± 0.005 ".
4. Significant capacitive load may inhibit start-up and operation, consult factory.
5. All DC/DC converters should be externally fused on the front end for protection.
6. Custom and modified product considered, consult factory.

Center Pinout



Standard Pinout

