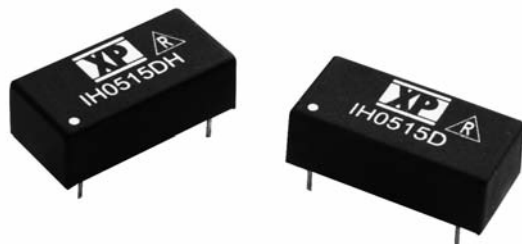


2 Watts

IH Series



- Dual Output
- SIP or DIP Package
- 1000 VDC Isolation
- Optional 3000-6000 VDC Isolation
- MTBF >1.1 MHrs
- -40 °C to +85 °C Operation
- 3 Year Warranty

Specification

Input

Input Voltage Range	• Nominal $\pm 10\%$
Input Reflected Ripple Current	• 20 mA pk-pk (5Hz to 20 MHz with 12 μ H)
Input Reverse Voltage Protection	• None
Input Filter	• Capacitor

Output

Output Voltage	• See table
Minimum Load	• None ⁽⁴⁾
Line Regulation	• 1.2%/1% ΔV_{in}
Load Regulation	• $\pm 10\%$ 20-100% load change (3.3 V models $\pm 20\%$)
Setpoint Accuracy	• $\pm 3\%$
Ripple & Noise	• 75 mV pk-pk max, 20 MHz bandwidth
Temperature Coefficient	• 0.02%/°C
Maximum Capacitive Load	• $\pm 220 \mu$ F
Cross Regulation	• 3.3 V and 5 V: $\pm 8\%$, all others: $\pm 5\%$ ⁽⁵⁾

General

Efficiency	• See table
Isolation Voltage	• 1000VDC (for higher isolation options - see note 2)
Isolation Resistance	• $10^9 \Omega$
Isolation Capacitance	• 60 pF typical
MTBF	• >1.1 MHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Temperature	• -40 °C to +85 °C
Storage Temperature	• -40 °C to +125 °C
Case Temperature	• 100 °C max
Cooling	• Convection-cooled

Notes

1. For DIP package, replace 'S' with 'D' in model number.
2. Add suffix '-H' to model number for 3000 VDC isolation. For higher VDC isolation, add suffix '-Hx' to model number where x=4 for 4000 VDC isolation, x=5 for 5200 VDC isolation and x=6 for 6000 VDC isolation.
3. Outputs will power-trade.
4. Operation at no load will not damage unit but it may not meet all specifications.
5. When one output is set to 100% load and the other varies between 25%-100% load.
6. All dimensions in inches (mm).
7. Pin pitch tolerance: ± 0.014 (± 0.35)
8. Case tolerance: ± 0.02 (± 0.5)
9. Weight: SIP 0.004 lbs (2.2 g), DIP 0.005 lbs (2.4 g)

Input Voltage	No Load Input Current	Output Voltage	Output Current ⁽⁶⁾	Efficiency	Model Number ^(1,2)
5 VDC	30 mA	± 3.3 V	± 200 mA	65%	IH0503S [†] ^
	30 mA	± 5.0 V	± 200 mA	72%	IH0505S [†] ^
	30 mA	± 9.0 V	± 111 mA	77%	IH0509S [†] ^
	30 mA	± 12.0 V	± 84 mA	78%	IH0512S [†] ^
	30 mA	± 15.0 V	± 66 mA	80%	IH0515S [†] ^
12 VDC	20 mA	± 3.3 V	± 200 mA	67%	IH1203S [†] ^
	20 mA	± 5.0 V	± 200 mA	75%	IH1205S [†] ^
	20 mA	± 9.0 V	± 111 mA	77%	IH1209S [†] ^
	20 mA	± 12.0 V	± 84 mA	82%	IH1212S [†] ^
	20 mA	± 15.0 V	± 66 mA	82%	IH1215S [†] ^
24 VDC	10 mA	± 3.3 V	± 200 mA	68%	IH2403S [†] ^
	10 mA	± 5.0 V	± 200 mA	75%	IH2405S [†] ^
	10 mA	± 9.0 V	± 111 mA	80%	IH2409S [†] ^
	10 mA	± 12.0 V	± 84 mA	82%	IH2412S [†] ^
	10 mA	± 15.0 V	± 66 mA	82%	IH2415S [†] ^
48 VDC	6 mA	± 3.3 V	± 200 mA	60%	IH4803S
	6 mA	± 5.0 V	± 200 mA	73%	IH4805S
	6 mA	± 9.0 V	± 111 mA	77%	IH4809S
	6 mA	± 12.0 V	± 84 mA	80%	IH4812S
	6 mA	± 15.0 V	± 66 mA	80%	IH4815S
	6 mA	± 24.0 V	± 42 mA	80%	IH4824S

[†] Available from Farnell. See pages 266-269.

[^] Available from Newark. See pages 270-272.

Mechanical Details

