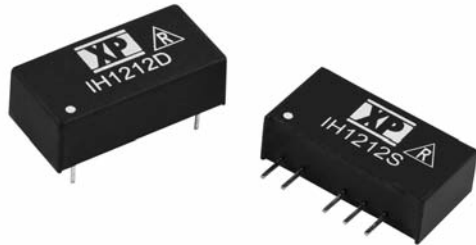


# 2 Watts IH Series



- 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 ±10%                                      |
| Input Reflected Ripple Current   | • 20 mA pk-pk through 12 µH inductor, 5Hz to 20 MHz |
| Input Reverse Voltage Protection | • None  |
| Input Filter                     | • Capacitor   |

### Output

- |                         |  |
|-------------------------|--|
| Output Voltage          | • See table  |
| Minimum Load            | • None <sup>(3)</sup>                                |
| Line Regulation         | • 1.2%/1% Δ Vin                                      |
| Load Regulation         | • ±10% 20-100% load change (3.3 V models ±20%)       |
| Setpoint Accuracy       | • ±3%  |
| Ripple & Noise          | • 75 mV pk-pk max, 20 MHz bandwidth                  |
| Temperature Coefficient | • 0.02%/°C   |
| Maximum Capacitive Load | • ±220 µF  |
| Cross Regulation        | • 3.3 V and 5 V: ±8%, all others: ±5% <sup>(4)</sup> |

### General

- |                       |   |
|-----------------------|---|
| Efficiency            | • See table                               |
| Isolation Voltage     | • 1000 VDC <sup>(2)</sup>                 |
| Isolation Resistance  | • 10 <sup>9</sup> Ω                       |
| 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. Operation at no load will not damage unit but it may not meet all specifications.
4. When one output is set to 100% load and the other varies between 25%-100% load.
5. All dimensions in inches (mm).
6. Pin pitch tolerance: ±0.014 (±0.35)
7. Case tolerance: ±0.02 (±0.5)
8. 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	Efficiency	Model Number <sup>(1,2)</sup>
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↑^
	30 mA	±24.0 V	±42 mA	80%	IH0524S↑^
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↑^
	20 mA	±24.0 V	±42 mA	82%	IH1224S↑^
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↑^
	10 mA	±24.0 V	±42 mA	82%	IH2424S↑^
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 & element14. See pages 284-290.

^ Available from Newark. See pages 291-296.

## Mechanical Details

