

# 2 Watts

## IH Series



- Dual Output
- SIP Package
- DIP Package
- 1000 VDC Isolation
- Optional 3000 VDC Isolation
- Short Circuit Protection
- -40°C to +85°C Operation

### Specification

#### Input

Input Voltage Range	• Nominal $\pm 10\%$
Input Current (no load)	• See table
Input Reflected Ripple	• 200 mV pk-pk
Input Reverse Voltage Protection	• None

#### Output

Output Voltage	• See table
Minimum Load	• None
Line Regulation	• 1.2%/1% $\Delta V_{in}$
Load Regulation	• $\pm 8\%$ 20-100% load change
Setpoint Accuracy	• $\pm 5\%$
Ripple & Noise	• 75 mV pk-pk
Temperature Coefficient	• 0.02%/°C
Short Circuit Protection	• 1 s max
Maximum Capacitive Load	• $\pm 390 \mu\text{F}$

#### General

Efficiency	• See table
Isolation Voltage	• 1000 VDC (3000 VDC -H option)
Isolation Capacitance	• 60 pF typical
Switching Frequency	• 80 kHz typical

#### Environmental

Operating Temperature	• -40 to +85 °C
Storage Temperature	• -40 to +125 °C
Case Temperature	• 100 °C max
Cooling	• Free-air convection

#### Notes

1. For DIP package, replace 'S' with 'D' in model number.
2. Add suffix '-H' to model number for 300VDC isolation.
3. Outputs will power-trade.
4. 0.31" (9.65mm) for 3000V versions.
5. All dimensions in inches (mm)

Input Voltage	No Load Input Current	Output Voltage	Output Current <sup>(6)</sup>	Efficiency	Model Number <sup>(1,2)</sup>
5 VDC	25 mA	$\pm 3.3$ V	$\pm 200$ mA	75%	IH0503S
	35 mA	$\pm 5.0$ V	$\pm 200$ mA	75%	IH0505S†
	28 mA	$\pm 9.0$ V	$\pm 111$ mA	75%	IH0509S†
	30 mA	$\pm 12.0$ V	$\pm 84$ mA	75%	IH0512S†
	30 mA	$\pm 15.0$ V	$\pm 66$ mA	75%	IH0515S†
	40 mA	$\pm 24.0$ V	$\pm 42$ mA	75%	IH0524S
12 VDC	12 mA	$\pm 3.3$ V	$\pm 200$ mA	75%	IH1203S
	20 mA	$\pm 5.0$ V	$\pm 200$ mA	75%	IH1205S†
	15 mA	$\pm 9.0$ V	$\pm 111$ mA	75%	IH1209S†
	15 mA	$\pm 12.0$ V	$\pm 84$ mA	75%	IH1212S†
	18 mA	$\pm 15.0$ V	$\pm 66$ mA	75%	IH1215S†
24 VDC	20 mA	$\pm 24.0$ V	$\pm 42$ mA	75%	IH1224S
	5 mA	$\pm 3.3$ V	$\pm 200$ mA	75%	IH2403S
	7 mA	$\pm 5.0$ V	$\pm 200$ mA	75%	IH2405S†
	7 mA	$\pm 9.0$ V	$\pm 111$ mA	75%	IH2409S†
	8 mA	$\pm 12.0$ V	$\pm 84$ mA	75%	IH2412S†
48 VDC	8 mA	$\pm 15.0$ V	$\pm 66$ mA	75%	IH2415S†
	8 mA	$\pm 24.0$ V	$\pm 42$ mA	75%	IH2424S
	4 mA	$\pm 3.3$ V	$\pm 200$ mA	75%	IH4803S
	6 mA	$\pm 5.0$ V	$\pm 200$ mA	75%	IH4805S
	6 mA	$\pm 9.0$ V	$\pm 111$ mA	75%	IH4809S
48 VDC	6 mA	$\pm 12.0$ V	$\pm 84$ mA	75%	IH4812S
	6 mA	$\pm 15.0$ V	$\pm 66$ mA	75%	IH4815S
	6 mA	$\pm 24.0$ V	$\pm 42$ mA	75%	IH4824S
	6 mA	$\pm 24.0$ V	$\pm 42$ mA	75%	IH4824S

† Available from Farnell InOne. See pages 236-237

### Mechanical Details

