

2W

Convection cooled



The IH series is housed in a SIP7 or DIP14 plastic case for PCB mounting.

Featuring a $\pm 10\%$ input voltage range for 5, 12 & 24VDC nominal inputs, offering dual outputs $\pm 3.3, \pm 5, \pm 9, \pm 12, \pm 15 \& \pm 24VDC$.

The 2W IH provides 1.0kVDC isolation between input and output, with 3, 4, 5.2 & 6kV isolation as an option, short circuit protection is standard.

The operating temperature range is from -40°C to +85°C with no derating.





Features

- Unregulated dual outputs
- ▶ ±10% input range
- ▶ Dual outputs ±3.3 to ±24VDC
- ► SIP7 or DIP14 package
- ▶ 1.0kVDC isolation, options up to 6.0kVDC
- ▶ -40°C to +85°C operating temperature
- 3 year warranty

Applications



Robotics



Instrumentation









ndustrial

Process contro

Dimensions

See mechanical details

More resources

Click the link or scan the code





Models & ratings

Model number ⁽¹⁾	Input voltage	No load input current	Output voltage	Output current	Efficiency
IH0503S		30mA	±3.3VDC	±200mA	65%
IH0505S	5.0VDC	30mA	±5.0VDC	±200mA	72%
IH0509S		30mA	±9.0VDC	±111mA	77%
IH0512S		30mA	±12.0VDC	±84mA	78%
IH0515S		30mA	±15.0VDC	±66mA	80%
IH0524S		30mA	±24.0VDC	±42mA	80%

Continued on page 2

Notes:

- 1. For DIP package, replace 'S' with 'D' in model number.
- Add suffix 'H' to model number for 3kVDC isolation. For higher VDC isolation, add suffix 'Hx' to model number where x=4 for 4kVDC isolation, x=5 for 5.2kVDC isolation and x=6 for 6kVDC 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 mm (inches).
- 6. Pin pitch tolerance: ±0.35 (±0.014)
- 7. Case tolerance: ±0.5 (±0.02)
- 8. Weight: SIP 2.2g (0.004lbs), DIP 2.4g (0.005lbs)

IH series



Models & ratings

Model number ⁽¹⁾	Input voltage	No load input current	Output voltage	Output current	Efficiency
IH1203S		20 mA	±3.3VDC	±200mA	67%
IH1205S	1	20 mA	±5.0VDC	±200mA	75%
IH1209S	12.0VDC	20 mA	±9.0VDC	±111mA	77%
IH1212S	12.0VDC	20 mA	±12.0VDC	±84mA	82%
IH1215S		20 mA	±15.0VDC	±66mA	82%
IH1224S	1	20 mA	±24.0VDC	±42mA	82%
IH2403S		10 mA	±3.3VDC	±200mA	68%
IH2405S	24.0VDC	10 mA	±5.0VDC	±200mA	75%
IH2409S		10 mA	±9.0VDC	±111mA	80%
IH2412S		10 mA	±12.0VDC	±84mA	82%
IH2415S		10 mA	±15.0VDC	±66mA	82%
IH2424S		10 mA	±24.0VDC	±42mA	82%

Notes:

- 1. For DIP package, replace 'S' with 'D' in model number.
- 2. Add suffix 'H' to model number for 3kVDC isolation. For higher VDC isolation, add suffix 'Hx' to model number where x=4 for 4kVDC isolation, x=5 for 5.2kVDC isolation and x=6 for 6kVDC 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 mm (inches).
- 6. Pin pitch tolerance: ±0.35 (±0.014)
- 7. Case tolerance: ±0.5 (±0.02)
- 8. Weight: SIP 2.2g (0.004lbs), DIP 2.4g (0.005lbs)

Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Input voltage range		±10		%	
Input reflected ripple current		20		mA pk-pk	12μH inductor and 47μF capacitor, 5Hz to 20MHz
Input filter	Capacitor				

Output

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Output voltage	See models	See models & ratings table			
Minimum load	0			%	No minimum load required
Line regulation		1.2/1		%	ΔVin
Load regulation		±10			20-100% load change (3.3VDC models ±20%)
Setpoint accuracy		±3		%	
Ripple & noise		75		mV pk-pk	20MHz bandwidth
Maximum capacitive load		±220		μF	
Cross regulation		±8		%	3.3 & 5VDC (all others: ±5%), when one output is set to 100% load and the other varies between 25%-100% load
Temperature coefficient		±0.02		μF	

General

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Efficiency	See models & ratings table				
Isolation voltage		1000		VDC	Add suffix 'H' to model number for $3kVDC$ isolation. For higher VDC isolation, add suffix 'Hx' to model number where $x=4$ for $4kVDC$ isolation, $x=5$ for $5.2kVDC$ isolation and $x=6$ for $6kVDC$ isolation.
Isolation resistance		10 ⁹		Ω	
Isolation capacitance		60		pF	
Mean time between failure		>1.34		Mhrs	MIL-HDBK-217F, +25°C GB







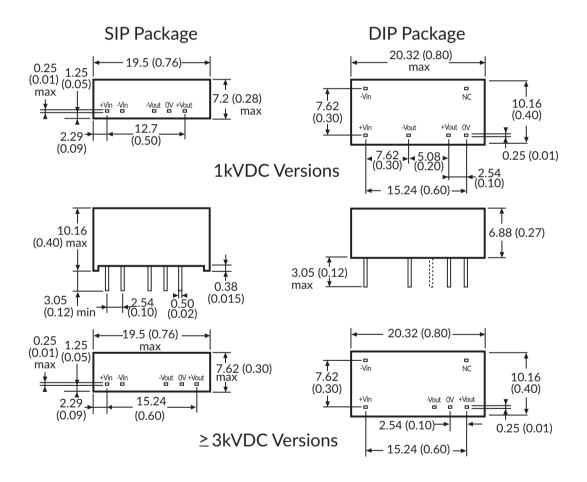
Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Operating temperature	-40		+85	°C	
Storage temperature	-40		+125	°C	
Case temperature			+100	°C	
Cooling	Convection cooled				

Safety approvals

Certification	Standard	Notes & conditions
CE	Meets all applicable directives	
UKCA	Meets all applicable legislation	

Mechanical details



Notes:

- 1. For DIP package, replace 'S' with 'D' in model number.
- 2. Add suffix 'H' to model number for 3kVDC isolation. For higher VDC isolation, add suffix 'Hx' to model number where x=4 for 4kVDC isolation, x=5 for 5.2kVDC isolation and x=6 for 6kVDC 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 mm (inches).
- 6. Pin pitch tolerance: ±0.35 (±0.014)
- 7. Case tolerance: ±0.5 (±0.02)
- 8. Weight: SIP 2.2g (0.004lbs), DIP 2.4g (0.005lbs)