

The IL series is housed in a SIP4 plastic case for PCB mounting. Featuring a $\pm 10\%$ input voltage range for 5, 12 & 15VDC nominal inputs, offering single outputs of 3.3, 5, 9, 12, 15 & 24VDC.

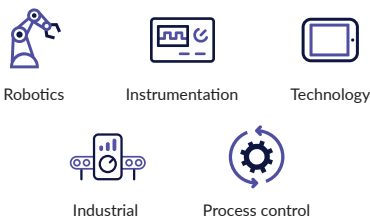
The 2W IL provides 1kVDC isolation between input and output as standard, with 3kVDC isolation available as an option. The operating temperature range is from -40°C to $+85^{\circ}\text{C}$.



Features

- ▶ Unregulated single output
- ▶ $\pm 10\%$ input range
- ▶ Single outputs 3.3 to 24VDC
- ▶ SIP4 package
- ▶ 1.0kVDC isolation, 3.0kVDC option
- ▶ -40°C to $+85^{\circ}\text{C}$ operating temperature
- ▶ 3 year warranty

Applications

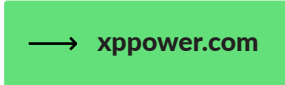


Dimensions

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 ⁽²⁾	Efficiency
IL0503S	5.0VDC	35mA	3.3VDC	400mA	71%
IL0505S		35mA	5.0VDC	400mA	77%
IL0509S		35mA	9.0VDC	222mA	80%
IL0512S		35mA	12.0VDC	168mA	82%
IL0515S		35mA	15.0VDC	132mA	82%
IL0524S		35mA	24.0VDC	84mA	82%

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Notes:
1. Add suffix 'H' to model for 3000 VDC isolation.
2. Operation at no load will not damage unit but it may not meet all specifications.

Models & ratings

Model number ⁽¹⁾	Input voltage	No load input current	Output voltage	Output current ⁽²⁾	Efficiency
IL1203S	12.0VDC	20mA	3.3VDC	400mA	72%
IL1205S		20mA	5.0VDC	400mA	78%
IL1209S		20mA	9.0VDC	222mA	82%
IL1212S		20mA	12.0VDC	168mA	84%
IL1215S		20 mA	15.0VDC	132mA	84%
IL1224S		25 mA	24.0VDC	84mA	82%
IL2403S	24.0VDC	10 mA	3.3VDC	400mA	74%
IL2405S		10mA	5.0VDC	400mA	80%
IL2409S		10mA	9.0VDC	222mA	84%
IL2412S		10mA	12.0VDC	168mA	84%
IL2415S		10mA	15.0VDC	132mA	84%
IL2424S		10mA	24.0VDC	84mA	84%

- Notes:
- 1. Add suffix 'H' to model for 3000VDC isolation.
 - 2. Operation at no load will not damage unit but it may not meet all specifications.

Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Input voltage range		±10		%	Nominal
Input reflected ripple current		20		mA pk-pk	12µH inductor, 5Hz to 20MHz
Input reverse voltage protection	None				
Input filter	Capacitor				

Output

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Output voltage	See models & ratings table				
Minimum load	0			%	Operation at no load will not damage unit but it may not meet all specifications.
Line regulation		1.2/1		%	Δ Vin
Load regulation		±10		%	20-100% load change (3.3VDC models: ±20%)
Setpoint accuracy		±3		%	
Ripple & noise			150	mV pk-pk	20MHz bandwidth
Temperature coefficient		0.02		%/°C	
Maximum capacitive load		470		µF	

General

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Efficiency	See models & ratings table				
Isolation voltage	1000			VDC	Optional 3000VDC -H option
Isolation resistance		10 ⁹		Ω	
Isolation capacitance		60		pF	
Switching frequency		70	650	kHz	Variable
Mean time between failure		>1.21		Mhrs	MIL-HDBK-217F, +25°C GB
Case material	Non conductive black plastic (UL94V-0 rated)				
Potting material	Epoxy (UL94V-0 rated)				
Pin material	C5191R-H solder-coated				
Solder process			260	°C	1.5mm from case 10s max

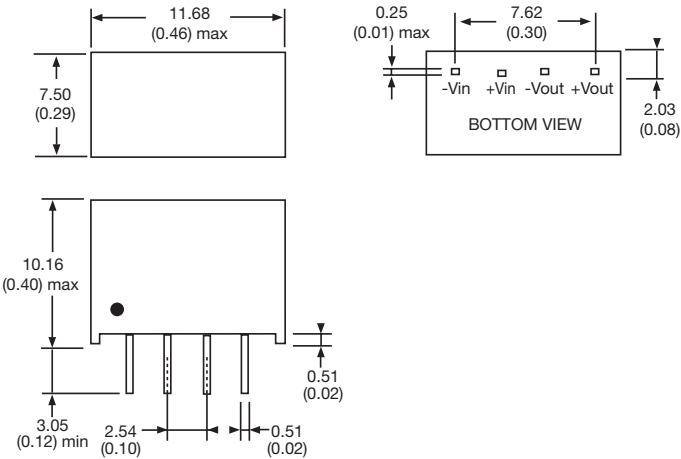
Environmental

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. All dimensions in mm (inches).
 2. Pin pitch tolerance: ± 0.35 (± 0.014), Case tolerance: ± 0.5 (± 0.02)
 3. Weight: 1.8g (0.004lbs)