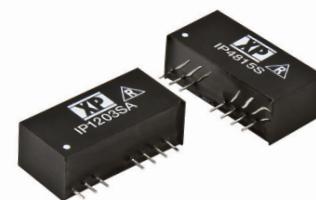


The IP series is housed in a SIP8 plastic case. Featuring a 4:1 input voltage range of 4.5 to 18VDC, 9 to 36VDC or 18 to 75VDC with both single and dual outputs, singles have 3.3, 5, 12 or 15VDC with duals having ± 5 , ± 12 & ± 15 VDC.

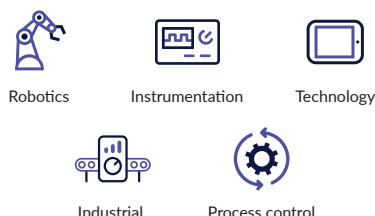
The 3W IP provides 1.6kVDC isolation between input and output, the output has short circuit protection, remote On/Off is standard. The operating temperature range is from -40°C to +85°C, with derating above +70°C.



Features

- ▶ Regulated single & dual outputs
- ▶ 4:1 input range
- ▶ Single outputs 3.3 to 15VDC
- ▶ Dual outputs ± 5.0 to ± 15 VDC
- ▶ SIP8 package
- ▶ 1.6kVDC isolation
- ▶ Remote On/Off
- ▶ -40°C to +85°C operating temperature
- ▶ Full power to +70°C
- ▶ 3 year warranty

Applications



Dimensions

21.85 x 9.20 x 11.10 (0.86" x 0.36" x 0.44")

More resources

Click the link or scan the code

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Models & ratings

Model number	Input voltage	No load input current ⁽¹⁾	Output voltage	Max capacitive load	Output current	Efficiency
IP1203SA	4.5-18.0VDC	40mA	3.3VDC	1760 μ F	700mA	72%
IP1205SA			5.0VDC	1000 μ F	600mA	77%
IP1212SA			12.0VDC	170 μ F	250mA	81%
IP1215SA			15.0VDC	110 μ F	200mA	81%
IP1205S			± 5.0 VDC	± 470 μ F	± 300 mA	77%
IP1212S			± 12.0 VDC	± 100 μ F	± 125 mA	80%
IP1215S			± 15.0 VDC	± 47 μ F	± 100 mA	80%

Continued on page 2

Notes:

1. Operation at no load will not damage the converter but may not meet all specifications.

2. When one output is set to 100% load and the other varies between 25%-100% load.

Models & ratings

Model number	Input voltage	No load input current ⁽¹⁾	Output voltage	Max capacitive load	Output current	Efficiency
IP2403SA	9.0-36.0VDC	25mA	3.3VDC	1760μF	700mA	75%
IP2405SA			5.0VDC	1000μF	600mA	79%
IP2412SA			12.0VDC	170μF	250mA	82%
IP2415SA			15.0VDC	110μF	200mA	82%
IP2405S			±5.0VDC	±470μF	±300mA	79%
IP2412S			±12.0 VDC	±100μF	±125mA	79%
IP2415S			±15.0 VDC	±47μF	±100mA	80%
IP4803SA	18.0-75.0VDC	15mA	3.3VDC	1760μF	700mA	74%
IP4805SA			5.0VDC	1000μF	600mA	78%
IP4812SA			12.0VDC	170μF	250mA	80%
IP4815SA			15.0VDC	110μF	200mA	81%
IP4805S			±5.0VDC	±470μF	±300mA	79%
IP4812S			±12.0 VDC	±100μF	±125mA	79%
IP4815S			±15.0 VDC	±47μF	±100mA	79%

Notes:

- Operation at no load will not damage the converter but may not meet all specifications.
- When one output is set to 100% load and the other varies between 25%-100% load.

Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Input voltage range	See models and ratings table				
Input reflected ripple current		20		mA pk-pk	12μH inductor and 47μF capacitor, 5Hz to 20MHz
Input surge		25		VDC	12V models
		50			24V models
		100			48V models
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			±0.2	%	
Load regulation			±1.0	%	10-100% load change, operation at no load will not damage unit but it may not meet all specifications.
Setpoint accuracy			±1.0	%	
Ripple & noise		30		mV pk-pk	20MHz bandwidth
Temperature coefficient		0.02		%/°C	
Short circuit protection	Continuous with auto recovery (foldback)				
Cross regulation		±5		%	On dual output models, when one output is set to 100% load and the other varies between 25%-100% load.
Remote on/off	Apply 2 to 4mA to pin 3 to turn off output				

General

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Efficiency	See models & ratings table				
Isolation voltage		1600		VDC	
Isolation resistance		10 ⁹		Ω	
Isolation capacitance		200		pF	
Switching frequency	100		600	kHz	Variable
Mean time between failure		>1.7		Mhrs	MIL-HDBK-217F, +25°C GB

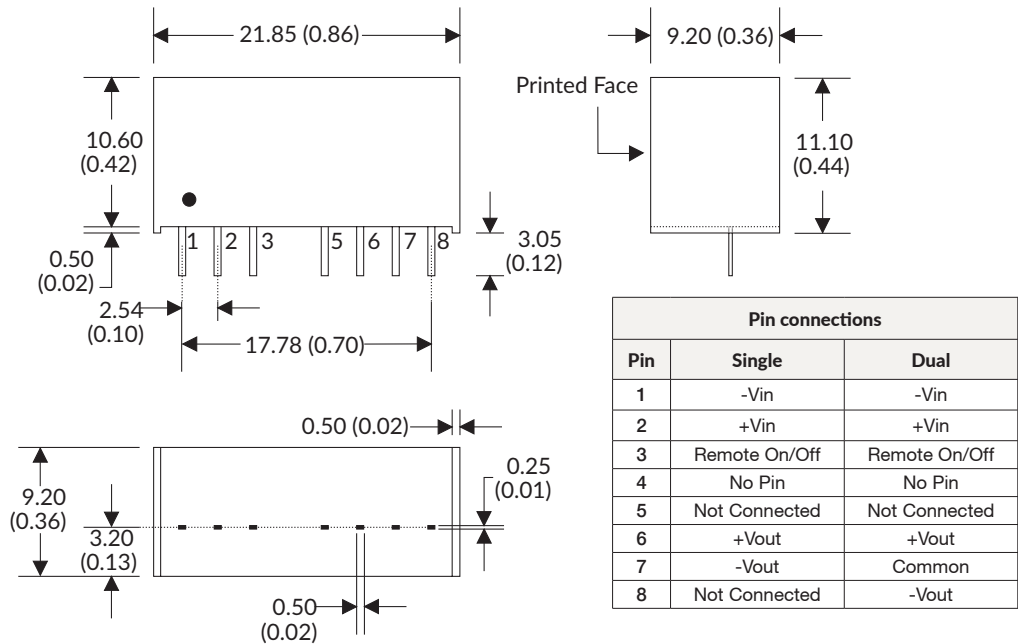
Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Operating temperature	-40		+85	°C	Derate from 100% load at +70°C to 30% load at +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)
 - 3. Case tolerance: ±0.5 (±0.02)
 - 4. Weight: 6.5g (0.014lbs)