

ELECTRONIC POWER CONDITIONERS

The interVOLT mini series power conditioners are a new compact version of our hugely popular heavy duty range. An innovative product designed to address the many issues associated with on-board power problems including voltage surges, transients, spikes, etc. They are in fact a converter, stabilizer, isolator and regulator all built into a single package. The mini SPCi power conditioners are galvanically isolated (input to output) and designed to protect sensitive and often expensive equipment connected to 12 or 24VDC power sources. Please see overleaf for our list of features and specifications.

The new purpose built extruded housing with moulded end caps is as functional as it is attractive. The new design features effective heat dissipation, easy mounting, compact size and no sharp edges!

purpose designed

Visual indication of the system status provides important information for both users and installers. The tri-colour LED will display an array of symptoms to assist in troubleshooting on-board problems.

self-diagnostics

Only high quality, marine grade components are used in construction. All hardware used in assembly is non-ferrous and the terminals are all plated brass. Circuit boards are tropicalised for ultimate protection.

corrosion resistant



Connection is made safe and sure by using heavy-duty custom designed terminals. Connectors are protected by insulated barriers to prevent inadvertent shorting. All hardware is electrical grade and non-corrosive.

heavy duty terminals

A special switch allows the installer or user to select the desired voltage output. Choose between a high (default) setting for general use or a low setting for voltage sensitive equipment – at the flick of a switch!

selectable output

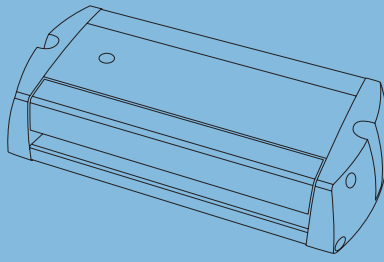
The unique extruded cover closes to protect the terminals and electronics from external objects including fingers! This prevents inadvertent short circuiting, ensuring safety and providing peace-of-mind.

easy access cover



DIAGNOSTIC INDICATOR

Diagnostics: Unique to interVOLT, is the self diagnosing electronics. This design provides valuable feedback to installers and operators alike. An LED displays the system status and will indicate standby power, low input voltage, over temperature, overload and output short circuit.



SPCi121207



SPCi242405

Continuous Load Rating @ 30°C(80°F)	7 Amps @ 13.6VDC	5 Amps @ 27.2VDC
Peak Load Rating @ 30°C (80°F)*	10 Amps @ 13.6VDC	7 Amps @ 27.2VDC
Length Overall	170mm (6.690")	170mm (6.690")
Width Overall	80mm (3.150")	80mm (3.150")
Height Overall	40mm (1.575")	40mm (1.575")
Weight	418 grams (14.75 oz)	418 grams (14.75 oz)
Input Voltage Range	10 – 16VDC	17 – 33VDC
Output Voltage – Low Setting	12.5 VDC nominal	25.0 VDC nominal
Output Voltage – High Setting	13.6 VDC nominal	27.2 VDC nominal
Standby Current Draw	↓20mA	
Power Conversion Efficiency @ 30°C (80°F)	Typically 93%	
Output Ripple	Less than 20mV Peak to Peak	
Operating Temperature	-25°C to + 45°C	
Operating Humidity	Ideally less than 90%	
Enclosure Material	Marine grade aluminium dye anodised	
End Cap Material	Injection moulded electrical grade ABS/PC plastic	
Terminal Cover Material	Extruded temperature resistant ABS	
Diagnostic Indicator	Tri-colour LED – monitoring input voltage, overload, short circuit and temperature.	
Transient Voltage Protection	Filtering – Purpose designed circuit	
Overload/Short Circuit Protection	Shutdown – Current sensing circuit (automatic reset)	
Input Under Voltage Protection	Shutdown – Voltage sensing circuit (automatic reset)	
Over Temperature Protection	Shutdown – Temperature sensing circuit (automatic reset)	
Output Over Voltage Protection	Internal Fuse – Latching Zener circuit (not user serviceable)	
Input Reverse Polarity Protection	Internal Fuse – Diode bypass circuit (not user serviceable)	
Termination	Power – 6-32 UNC H/D screw terminal	
Conformity	Australian AS/NZS CISPR 11. European EN55011. International CISPR11 and IEC61204-3.	
Certification	EMC – Australian C Tick mark & European CE mark	



Protection: interVOLT isolated power conditions feature a range of devices designed to protect the electronics from various connection and application problems. The units are protected against short circuit, overloading and excessive temperature. An internal fuse protects the electronics in the event of component failure.



Performance: A key feature of the interVOLT mini series range is performance. Designed to operate in high ambient temperatures under constant load, the mini series delivers every time. Precise voltage regulation, superior noise filtering and excellent efficiency round off the performance package.

PASS

Conformity: interVOLT isolated power conditioners comply with Australian and European standards for electro-magnetic compatibility (EMC), displaying both the 'C' Tick and 'CE' marks. These approvals are supported by independent examination from a certified testing house. Our Declaration of Conformity is available upon request.



Isolation: A key feature of the new interVOLT SPCi mini series range is the input to output isolation. Galvanic isolation ensures

there is no physical connectivity between the input and output terminals providing many benefits including elimination of line interference, greater protection, better regulation and improved performance.

