

Chameleon 25W AC Power Module (ACP-1)

High-Performance Programmable Controllers for Extreme Environments



The Chameleon 25W AC Power Module (ACP-1) filters, pre-regulates, and distributes electrical power to other Chameleon modules connected to it. Multiple power modules attached to each other and fed from different power sources can provide seamless redundancy, reducing susceptibility to power outages, or load sharing to increase the power availability. Power modules on the same node are always online—if one should lose input power, another will instantaneously compensate and the deliver uninterrupted power to all loads. ACP-1 units are hot swappable: should the need arise to replace one, simply swap the front panel (with attached power board) and the unit is back online—there is no need to shut off the power.

As with all Chameleon modules, the ACP-1 offers unequalled ruggedness. It is specifically designed for sustained operation in severe environments, including those characterized by extreme shock, vibration, electro-magnetic interference, temperature, and/or humidity. Its fully-sealed enclosure (sealing end-caps not pictured) ensures long-lasting operation in the grimmest settings. In fact, Chameleon modules can operate fully submerged!

ENVIRONMENTAL CHARACTERISTICS

Operating Ambient Temperature Range.....	-40°C to 65°C
Storage/Transport Ambient Temperature Range.....	-40°C to 85°C
High Impact Shock.....	MIL-STD-901D
Mechanical Vibration.....	MIL-STD-167B
Electro-Magnetic Interference.....	MIL-STD-461E
Facial/Housing Protection.....	NEMA 1,2,4,4X,5,6,12,12K,13
Operating Humidity.....	100% RH, Condensing

ELECTRICAL CHARACTERISTICS

Input Voltage Range.....	75-123VAC
Input Frequency.....	DC, 40 to 400Hz
Input Spike Tolerance.....	1000V (2Ω source impedance)
Interface Standard.....	MIL-STD-1399
Output Power.....	25 Watts
Output Isolation (Primary to Secondary).....	1500 VAC
Max inrush current (115 VAC at Full Load).....	12 A RMS for 5 mS
Max steady state input power (115 VAC at Full Load).....	35 Watts
Power Factor (115 VAC at Full Load).....	0.63
Turn-on time at 90 VAC.....	40 mS
Hold-up time at 90 VAC.....	30 mS
Input Fuse.....	1A rating, I ² T=2.01 A ² -Sec
Supported Cable Diameters / Wire Gauges.....	Two glands 0.24"-0.47" and two glands 0.16"-0.31" / 16-28 AWG

PHYSICAL CHARACTERISTICS

Status Readouts.....	One Power ON LED Indicator
Weight.....	1.5 lb
Dimensions.....	2.5" W x 6" L x 3" H

MAINTAINABILITY / RELIABILITY

- One primary or secondary lead can be shorted to ground without loss of operation
- Supports hot swapping
- Each power supply module can be paralleled to provide load sharing, uninterrupted power during hot swap, and/or redundant power sources

SAFETY FEATURES

- Storage capacitors automatically discharge after power board is removed from enclosure
- Over-current shutoff
- Input circuit is fused

Fairmount Automation, Inc.
4621 West Chester Pike
Newtown Square, PA 19073
(610) 356-9840
www.FairmountAutomation.com

