

FlexAir[®] IsoCool

Energy Efficient Thermal Management Solutions



The IsoCool is a stand-alone battery cooling system designed for installation within a telecom shelter. IsoCool creates a temperature zone for backup batteries that is lower than the ambient temperature within the shelter. This lower temperature zone ensures optimal performance and extends the batteries' service life while minimizing the total cooling cost of the entire shelter. This is achieved by increasing the shelter temperature while maximizing the use of free cooling.

IsoCool is a modular enclosure that utilizes an AluZinc frame and Polyethylene foam walls. A 300 Watt (1K BTU/hr) air conditioner mounts on top of the enclosure. The modular structure ships in a flat pack, and can be assembled quickly and easily. Options with the IsoCool enclosure include alarm module with ModBus interface, graphical web interface for remote management.

Applications

Provides a thermally-controlled environment for batteries within a telecom shelter for wireline, wireless, and outside plant applications.

Product Features:

- Modular design for shelter and building interiors
- Meets UL94 flammability and GR-487 battery compartment ventilation requirements
- 300 Watt (1K BTU/hr) air conditioner
- DC powered (48VDC) air conditioner with Eco-mode operation
- Components ship in flat pack
- Quick and easy installation

The Purcell Advantage

Purcell Systems designs and manufactures thermally-managed outdoor enclosures that meet the exact needs of the enclosed equipment for network operators and utilities. Our enclosures provide comparable solutions to prefabricated buildings, containers and shelters at a fraction of the cost. Both standard and custom enclosures are delivered with the following capabilities:

Choice of Options: Pre-engineered and interchangeable modules provide optimal configurations with minimal cost and lead time.

Thermal Management: The industry's widest selection of heating and cooling systems ensures the most efficient thermal management solution with the lowest energy consumption.

Lowest Total Cost of Ownership: Engineering analysis and modeling ensures your enclosure configuration minimizes installation, maintenance, repair, capital, and operational expenses.

Equipment Integration and Staging: Electronic equipment can be staged and installed in our enclosures prior to final deployment and installation.



IsoCool		Thermal Management Systems
Exterior Dimensions		Air Conditioning
No A/C	904mm x 695mm x 1204mm 35.6"W x 27.4"D x 47.4"H	300W 1K BTU/hr
With A/C	904mm x 695mm x 1380mm 35.6"W x 27.4"D x 54.3"H	

Specifications		
EXTERIOR	INTERIOR	OTHER
Construction <ul style="list-style-type: none"> • Frame: Material thickness #1mm / .039" Corrosion Resistant AluZinc • Walls and Top: 30mm / 1.2" fire-rated Polyethylene foam panels: UL94, HF-1 • Finish: Cooling Unit cover painted with RAL 7035. Frame structure: AluZinc Panels: dark grey • Weight (Base Configuration): 20 kg / 44lbs 	Battery Containment <ul style="list-style-type: none"> • 760mm x 430mm x 1000mm / 29.9"W x 16.9"D x 39.4"H. Other sizes on request. 	Agency Compliance <ul style="list-style-type: none"> • IEC EN60950-1 2nd edition • Telcordia GR-487 Paragraph R3-130 for battery compartment ventilation;
Door/Side/Top Panels <ul style="list-style-type: none"> • Door: Secured to frame with magnetic strip • Side Panels: Secured to frame with double-sided tape 	Other Options <ul style="list-style-type: none"> • Alarms: A/C status, LEDs display, ModBus interface • Remote Management System via ModBus 	Graphical Use Interface <ul style="list-style-type: none"> • Web-based interface via www.netbiter.net
Cable Entry <ul style="list-style-type: none"> • Ingress/Egress: Five cable inlets on each side panel 		Environmental <ul style="list-style-type: none"> • Operating temperature: -33° to + 50°C • Humidity: 10-90%
Mounting Options <ul style="list-style-type: none"> • Secured to battery rack 		Warranty <ul style="list-style-type: none"> • 1 year