# **ALPHA TECHNICAL SHELTERS**

Electronic Equipment Enclosures from Concept to Site Activation

#### Visit us at www.alpha.ca/shelters





Your Power Solutions Partner

## **ALPHA TECHNICAL SHELTERS**



With the escalating demands for greater coverage and bandwidth, today's communications networks are placing equipment closer and closer to the end user, often involving remote installations.

Radios and the systems that keep them powered are often deployed into sites that feature little or no existing infrastructure to house and protect equipment, hence creating a need for a suitable, robust shelter.

"Technical Shelters" are structures designed for housing and protecting electronics and power equipment, commonly used in telecommunication base stations and remote

switching centers. Typically designed to be discreet, shelters are built to withstand extreme weather conditions and protect the critical internal communication equipment from vandalism and theft.

#### Typical scenarios that may fit technical shelters

- Communication networks (base stations, transmission nodes, cell sites, control centers etc)
- Remote and urban equipment/storage shelters (oil and gas, railroads, aviation)
- Remote monitoring of instruments on remote, exposed locales (e.g. mountain peaks)
- Cooling sheds for power utilities
- Fiber-optic and solar-powered huts and equipment
- Motor control and generators

Alpha Technologies has the network knowledge, engineering experience and resources to satisfy all of your power and electronic shelter requirements. Whether your next project involves a complex deployment at a remote site, a site upgrade due to expansion or improving protection of the existing electronic equipment, Alpha can work with your requirements, and turn them into a fully working powering site, when and where it's needed.

We offer a broad selection of turnkey services for technical shelter projects:

- Full cycle project management
- Site survey and geological testing
- System design and engineering drawings
- Building permits, on-site construction, installation and commissioning
- Shipping and off-loading
- Site completion including landscaping, fencing and security

Contact us with your specific requirements at **1.800.667.8743** or email **shelters@alpha.ca** Visit Alpha online at **www.alpha.ca/shelters** for more information

#### CHOOSING THE MOST Critical element - Power

Being a recognized leader in power conversion, protection and standby products, Alpha offers complete AC, DC and renewable energy powering solutions to reliably power your application, including complete power plants, distribution and system controllers, batteries, supporting systems/hardware and much more.

- DC Power Systems
- AC Power Systems
- Batteries
- Generators
- Cable Racks
- Climate Control Systems
- Safety and Security
- Solar Systems

At the heart of our technical shelters are Alpha's industry renowned Cordex<sup>®</sup> controllers, acting as the central management brain that tightly integrates and monitors performance of power, batteries, alarms, HVAC and other critical elements. Every Alpha controller is designed to be easily accessed through a common website browser.

#### **CUSTOMIZATION**

All Alpha shelters feature the ability to be fully customized, providing your critical equipment the ultimate protection in almost all scenarios. Alpha can provide shelters in a multitude of sizes and form factors (from small pole-mount outdoor enclosures to substantial multi-room shelters) depending on the application, all offering the same standard of technology, functionality, protection and robustness of a larger shelter. Modular designs permit future expansion where envisaged.

#### FUNCTIONALITY AND FEATURES

Depending on the application and requirements, Alpha has the ability to provide custom shelters that feature:

- Centralized/remote management (multiple alarms for intrusion, fire, fuel leaks)
- Single or multiple rooms
- Rugged outdoor construction, withstanding vandalism, break-ins, temperature extremes (sun, snow, ice)
- Fire and earth-quake resistance (fire-rated doors with heavy duty lockset and weather stripping)
- Impact resistance (including bullet proofing)
- Single or redundant climate control systems
- Fully insulated finished interiors—durable, low maintenance and light reflective
- Aesthetically attractive designs feature robust, exterior construction and a multitude of finishes and colors (powder coated, aggregate, wood/metal siding)
- Maintenance-free roof and truss system
- Available in either aluminum or steel construction (or other to suit purpose or budget)
- Optional all welded assembly: no screws or pop-rivets
- Optional modular designs that allow your shelter to grow with future needs
- NEMA rating if required

Our engineers and technicians are experts in power system installation and every customization project adheres to the highest levels of construction standards and safety. Our team has national coverage and a long history of successful turn-key installation projects in telecommunications, including outside plant and shelters.

#### **ENVIRONMENTAL CONTROLS**

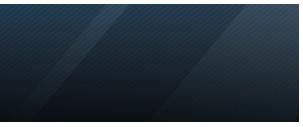
Being an ISO 14001:2004 certified company, reducing environmental impact is a standard mindset when designing our shelter solutions. From fuel spill prevention mechanisms, to the use of convection cooling to reduce or even eliminate the need for HVAC, every shelter strives to reach an environmentally friendly balance.

- Alpha's current portfolio of power solutions conform to RoHS standards and are designed to be highly efficient across a wide temperature range, while occupying less space
- Shelters can feature heavy insulation to minimize temperature fluctuations
- Heat exchangers/Hydronic heating systems reduce HVAC loads
- LED based lighting systems to minimize power consumption
- Specially designed fuel tanks ensure no fuel is wasted, with remote monitoring to alert fuel decreases or leaks
- Climate control mechanisms ensure internal temperatures are optimal during hot and cold weather extremes
- Solar power options available

#### **ACCESSORIES**

Should you require them, we have available an extensive set of accessories including:

- Access control
- Video cameras
- Fire suppression systems
- Diesel and propane generators and fuel tanks
- Cable chutes in floor
- Cable ladders
- HVAC systems
- Halo grounding systems
- Double doors





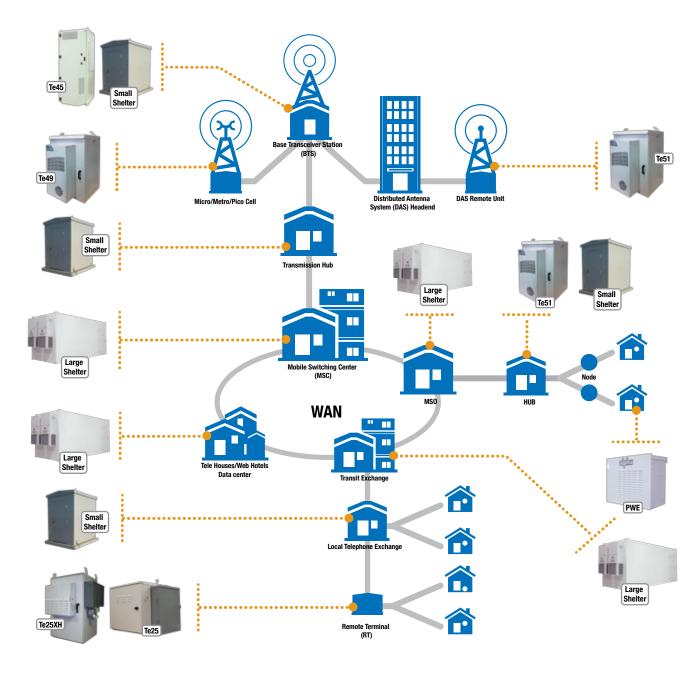




### **ALPHA OUTDOOR SOLUTIONS**

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Your Power Solutions Partner

The Alpha Group Alpha Technologies Ltd is a proud member of The Alpha Group - an alliance of independent companies who share a common philosophy – to create world class powering solutions. Collectively, Alpha Group members develop and manufacture AC, DC and renewable power conversion, protection and standby products, featured in millions of operational installations around the world today.

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