



## Customer Overview

### Mobile Data Centers

# Siemon Success Solution

*INDUSTRY*  
*Commercial*

- Canada
- Portable Data Centers
- Z-MAX Category 6A, V600 Cabinets, MapIT G2 Intelligent Infrastructure Management

## Challenge

Building a permanent data center can be an expensive and labor-intensive endeavor that requires permitting, strategic planning, design and deployment to ensure long-term sustainability for a lower total cost of ownership. For industries like petroleum, mining and forestry that explore and produce in remote areas, investing time and millions of dollars to build fully operable data centers at remote sites can add even more cost and risk—especially when those data centers may only need to be operational for years rather than decades.

When a major Canadian mining company needed to quickly build data centers to support operations at their multiple remote mining sites, they turned to Bulldog Containers to create an all-in-one, rapidly deployable mobile data center. While many companies build mobile construction facilities, modular offices or temporary living quarters and classrooms, Bulldog leveraged its expertise in networking, communications, security, process control and power generation to design and build these innovative containers. The mobile data centers are fully contained for fast deployment, increased quality and better reliability.

The Bulldog Containers house everything necessary to operate a reliable data center. Dual UPS and an on-board generator ensure continuous uptime, IP-based cameras and card or fingerprint scanners offer separate security zones, an advanced cooling system keeps active equipment at optimal temperature and humidity levels, and a raised floor offers easy access to network cabling and conduits. The containers even feature automatic fire suppression, comprehensive system monitoring and heated door frames. To ensure quality and flexibility while meeting industry standards, Bulldog chose to deploy network infrastructure solutions from Siemon for the mobile data centers.

## Solution

For the four server racks in the container for the mining company, Bulldog deployed Siemon's 48-inch deep, 24-inch wide V600 45U Cabinets. The lightweight stability and high capacity of the V600 cabinets made them ideal for the containerized data center. Positioned within the container in an optimum hot-aisle/cold-aisle configuration, these cabinets offer flexible mounting options and a high-flow perforated door for maximum air flow.

For the core fiber connections, Bulldog used Siemon Quick-Pak® Adapter Plates housed in Siemon Rack Mount Interconnect Center (RIC3) enclosures that offer enhanced fiber management and ease of use. The adapter plates feature six quad LC adapters for a total of 24 fibers per plate. Up to four adapter plates fit into the RIC3 for a maximum of 96 fiber ports in a 2U space.

For copper connections at the server level, Bulldog deployed Siemon's Z-MAX™ category 6A shielded end-to-end cabling system. Able to easily support 10 Gb/s transmission, Siemon's Z-MAX 6A shielded system is independently tested and provides the highest margins on all TIA and ISO/IEC performance requirements for category 6A, including critical alien crosstalk parameters. The system consisted of factory terminated and tested Z-MAX 6A shielded trunking assemblies, Z-MAX shielded patch panels and shielded patch cords.

For intelligent infrastructure management in the containerized data center, Bulldog also included Siemon's MapIT® G2 solution that consists of a master control panel and smart patch panels that enable remote patch cord tracing and connectivity diagnostic information. Siemon Z-MAX category 6A shielded jacks and faceplates were also deployed for network connectivity in the generator room, and Siemon HD® 6 UTP patch panels were deployed to support security systems and other miscellaneous network connections throughout the container.

## Results

Siemon stood above the rest with their technical Data Center expertise. While Siemon has a long-standing reputation for high quality and performance of its products, what separated them from their competitors was their people. For example, Siemon demonstrated its extensive Data Center expertise in a 4 hour Q&A session (originally planned for 30-minutes) with the Data Foundry team. Throughout the project, Siemon's quick response time and ability to create specialized solutions added to their strong value proposition. Siemon solidified its position in all project phases with its on-site training, competitive pricing and on-time delivery. With Siemon, Data Foundry had found their network infrastructure partner for the most redundant, connected, and secure data center and disaster recovery solution available in Texas.