



KELOWNA DATA CENTRE - TIER III

As TeraGo's flagship facility in Western Canada, the Kelowna Data Centre is designed to Uptime Institute Tier III standards to provide enterprise grade system availability and resiliency. It is strategically located in the south-central region of British Columbia, with one of the lowest geographic risk profiles in North America. All power, cooling, and connectivity infrastructure elements are built with N+1 and 2N redundancy to provide fault tolerance to the entire system.

The Facility:

Power

Distribution

- 6 MW power capacity
- 2N+1 back-up power infrastructure, from ring bus substations leading to the complex
- A and B side power in every cabinet
- 208V Single or 3-Phase, 120V Single Phase available

Generators

- Two 1,500kW generators (3,000 kW total) supplying backup power to the facility
- N+1 generator redundancy
- On-site fuel capacity provides >12 hours run time at full load (based on current capacity)

UPS System

- 1,000kW UPS each for A and B side power
- N+1 UPS redundancy

Whitespace & Building

- 30,000 sq. ft. facility
- 15,000 sq. ft. of total whitespace for IT
- 18" raised flooring
- Ground-level loading docks
- Secure room for equipment delivery and storage
- Customer Lounge area

Connectivity

- Carrier-neutral facility
- Fully redundant diverse fibre core fed from multiple providers including:
 - TeraGo
 - Bell
 - Zayo
 - Shaw
 - Telus



Cooling System

Chillers

- Two 250-tonne CRAC units, supporting >1MW IT Load at capacity
- N+1 Cooling redundancy
- 'Free cooling' capabilities during winter months due to region's climate

Cooling System Design

- Cold aisle containment configuration
- Chilled water system closed loop

Cabinet Space

- Full cabinet 50 Rack Units (50RU)
- Half Cabinets available
- In-row cross connects with pre-engineered cable plant to all cabinets
- Standard rack PDUs provided; customer supplied PDUs can be supported
- Dual cable trays and ladders separating inbound vs. outbound cabling
- Depth-adjustable railings

Security and Monitoring

- 24/7 video monitoring and surveillance by Network Operations Centre
- Multi-factor access authentication (access card and biometric)

Compliance and Certifications



TGO Cloud Platform

