



MISSISSAUGA DATA CENTRE (FTB) — TIER III

As Hut 8's flagship facility in Eastern Canada, the Mississauga Data Centre is designed to Uptime Institute Tier III standards to provide enterprise grade system availability and resiliency. The data centre space resides on the second floor of a complex, designed and constructed by Blackberry, providing state-of-the-art design elements not found in similar facilities, including an indoor generator facility located near the data centre building for added redundancy. All power, cooling, and connectivity infrastructure elements are built with 2N redundancy to provide fault tolerance to the entire system.

The Facility

Power

Distribution

- 4 MW designed power capacity
- In-row Remote Power Panels (RPPs) to allow for more efficient power monitoring and distribution
- 2N back-up power infrastructure
- Two dedicated municipal hydro substations
- A and B side power in every cabinet
- 208V Single or 3-Phase, 120V Single Phase available

Generators

- Ten 600kW generators (6,000 kW total) supplying backup power to the complex
- N +1 generator redundancy
- On-site fuel capacity provides > 12 hours run time at full load (based on current capacity)
- Fuel capacity - 48,000 (L) capacity

UPS system

- 900kW UPS each for A and B side power
- Clean power supplied by double conversion UPS
- 2N UPS redundancy

White space and building

- 29,000 sq. ft. facility
- 6,420 sq. ft. of total whitespace for IT
- 25" raised flooring, with all sub-floor outlets raised 8" above ground level
- Full height and truck-bed height loading docks
- Secure room for equipment delivery and storage
- Customer lounge area

Connectivity

- Carrier-neutral facility
- Diverse building fibre entrances
- Redundant connectivity between other data centres
- Internet transit from multiple providers including:
 - Bell
 - Zayo
 - Rogers
 - TeraGo
 - Cogent
 - Hut 8





Cooling system

Chillers

- Fourteen 30-tonne CRAC units, supporting > 1MW IT Load in a N+1 configuration
- Independent air-cooled rooftop cooling unit

Cooling system design

- Hot aisle/cold aisle airflow configuration
- Chilled water towers and closed glycol loop

Cabinet space

- Full cabinet includes 42 Rack Units (42U)
- Half cabinets available
- In-row cross connects with pre-engineered cable plant to all cabin
- 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



*Case by Case – More solution base assessment

Hut 8 Cloud Platform (K4lowna)

