TECHNICAL SPECIFICATIONS

B1BRISBANE

About **B1**BRISBANE

B1 offers 1,650m^2 of high-density technical space and is located in the heart of Brisbane's CBD, close to major public and telecommunications infrastructure. This enterprise-class colocation facility is Queensland's most fibre-connected commercial data centre and provides easy, on-demand access to a myriad of local and global cloud platforms such as AWS, Microsoft Azure, Google Cloud, Oracle Cloud, IBM Cloud and Alibaba Cloud through AXON.

Over 80% of B1's construction is solid concrete, providing extra security and fire protection, while the elevated Wharf St location means B1 was well above the peak levels of the 2011 and 1974 floods.

BUILDING OVERVIEW

- Six storey 2,900m^2 building with additional basement.
- Total technical space approximately 1,650m^2 and rooftop plant.
- 700 rack capacity.
- 350m^2 per data hall.
- 500mm raised floors on Levels 3 to 6.
- Floor is reinforced concrete suspended slab.
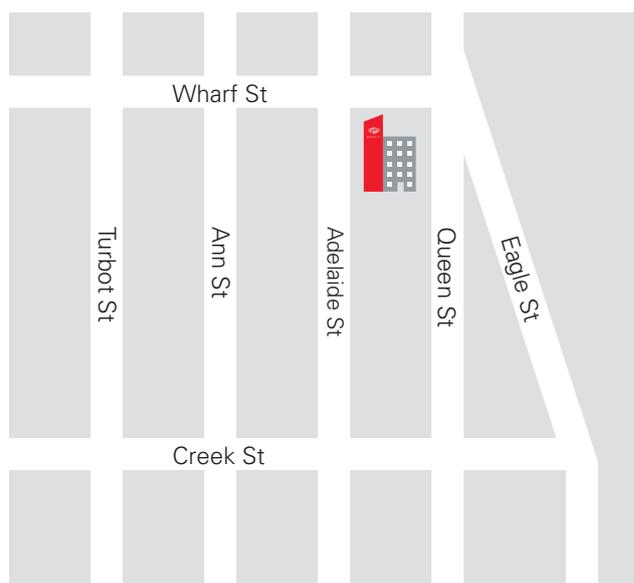
POWER

- Available power of 5MVA.
- IT load capacity of approximately 2.25MW.
- Minimum N+1 redundancy.
- Dual underground 11kV Energex feeders from city power grid.
- N+1 redundant 11kV/415V 2500kVA distribution transformers.
- N+1 redundant 1.2MW UPS modules for data centre load.
- 100% standby generator power.
- (Cummins V16 60 litre quad turbo diesel with 2.25MVA output) with N+1 redundancy.
- Full N+1 main electrical infrastructure extending to N+N at power rail level.
- Diverse path vertical distribution cabling to data centre floors.
- Minimum 24 hours' onsite fuel supply.

COOLING

- N+1 air-cooled UNIFLAIR chillers with variable speed motors.
- Dual chilled water risers servicing the building.
- Chilled water buffer tank with dual water bypass.
- Multiple redundant water pump and compressor configuration.
- Redundant back-up pipe systems to essential equipment.
- Server heat load approximately 1,400 W/m^2.
- N+1 Computer Room Air Conditioning (CRAC) units per data centre room.
- CRAC units fitted with supply temperature control and floor pressure control.
- Cold aisle containment system on Levels 3 to 6.
- Hot aisle containment system on Level 2.
- Average cold aisle temperature of 22 +/-2 degrees.
- Average cold aisle relative humidity of 50% +/- 15%.

FIRE SUPPRESSION AND MONITORING

- Inert gas fire suppression system.
- Leak detection systems.
- Distributed fire alarm control equipment to avoid single point of failure.
- Two monitored fire escapes.
- External water sprinkler system to protect from neighbouring building fires.
- Water misting system to protect generators from fire.
- Fully addressable analogue fire alarm system compromising Fire Indicator Panel (FIP), mimic panels, heat detection and MASDs systems.

SECURITY

- Individual credential checks prior to authorisation.
- 24/7 onsite concierge personnel.
- Biometric fingerprint security for data centre access.
- Anti-cloning access card encryption.
- Secure lifts between floors with personnel trap entrance points.
- Intruder-resistant glass, steel mesh and solid concrete walls.
- Extensive coverage by motion sensitive CCTV cameras.
- Remote monitoring and control of rack access via ONEDC®.
- Monitoring of news and weather for external security risks.
- Designed with advice from ASIO T4 accredited consultants and in consideration of ASIO levels of security and the future requirements of the Protective Security Policy framework (PSPF).

SUSTAINABILITY

- Air-cooled chiller with free cooling technology, reducing water consumption.
- APC highly efficient, power protected UPS system.
- Thermally insulated data hall floors.
- External walls clad with aluminium composite sheeting to reduce heat transmission.
- Low volatile organic compound (VOC) materials and paint.
- Antistatic vinyl on Levels 1 and 2.
- Energy efficient lighting (fluro or LED) meeting AS1680.2.2 standard.
- PUE target is 1.6 at peak load.

TELECOMMUNICATIONS

- Diverse underground cable pathways to the building.
- Dedicated interconnect room for cable connections.
- Access to choice of 50+ carrier networks.

CUSTOMER SERVICES

- Sound-proof boardroom.
- Chill-out room equipped with kitchen facilities and Nespresso machine, TV, lounge and Foxtel.
- Equipment staging room.
- Customer carpark.
- Spare parts vending machine.
- Guest Wi-Fi.

CERTIFICATIONS

ISO 9001:2015 Quality Management System

Quality ISO 9001

ISO 27001:2013 Information Security Management System (ISMS)

Information Security ISO 27001
SAI GLOBAL