



# TECHNICAL SPECIFICATIONS **B1**BRISBANE

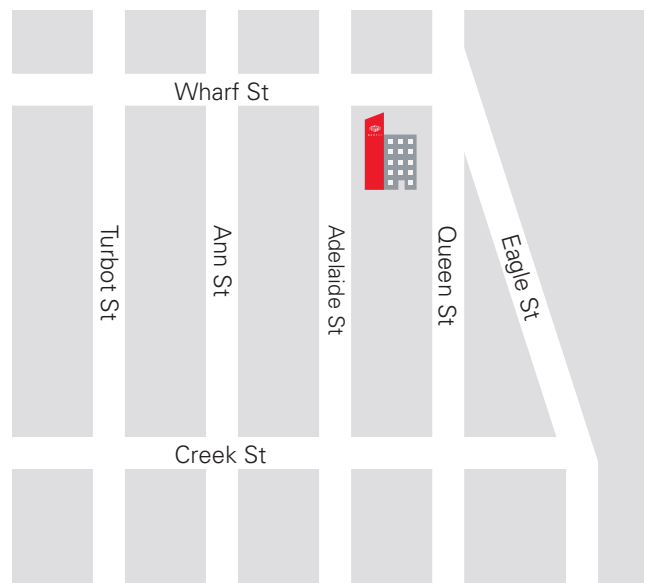
## About **B1**BRISBANE

B1 offers 1,650m<sup>2</sup> 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, IBM SoftLayer, Microsoft Azure and Office 365 through AXONVX.

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<sup>2</sup> building with additional basement.
- Total technical space approximately 1,650m<sup>2</sup> and rooftop plant.
- 700 rack capacity.
- 350m<sup>2</sup> 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<sup>2</sup>.
- 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 +/- 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 comprising 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

