



TECHNICAL SPECIFICATIONS

P1PERTH

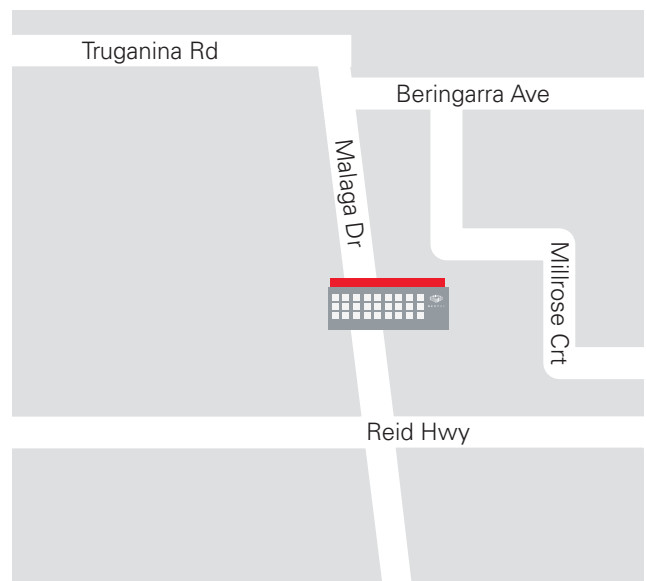
About P1PERTH

Perth's only independent colocation data centre, P1 is an enterprise-class facility offering 3,000m² of high-density technical space and on-demand connectivity 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.

P1 is strategically located in Malaga, 13km northeast of Perth's CBD and has excellent access to major public and telecommunications infrastructure. P1 has UTI Tier III certifications and showcases the latest advances in data centre technology, such as the innovative DRUPS system delivering 100% availability of all critical systems.

BUILDING OVERVIEW

- Three storey 10,500m² building.
- Total technical space approximately 3,000m².
- 1,500 rack capacity.
- Two main data halls of 1,200m² and 1,400m².
- Office and common areas total 2,800m².
- 100% concrete construction for data halls.
- 900mm raised floors in data halls and service corridors.
- Floor is reinforced concrete with 14.4k Pa floor load capacity.



POWER

- Available power of 12MVA.
- IT load capacity of approximately 6MW.
- Minimum N+1 redundancy on power supply.
- Multiple power distribution units providing N+N final circuit distribution to IT racks.
- Harmonic distortion controlled and monitored by UPS.
- Full N+1 main electrical infrastructure extending to N+N at power rail level.
- Ultimate 6+1, 1670kVA Diesel Rotary UPS [DRUPS] units on an Isolated Parallel bus for 100% no break IT and mechanical power.
- Minimum 24 hours' onsite fuel supply.

COOLING

- N+1 high efficiency chillers and pumps.
- Dual primary pipework header and distribution system.
- Secondary pipework distribution serving data hall equipment valved and looped providing dual path.
- Multiple redundant water pump and compressor configuration.
- Leak detection system.
- Server heat load approximately 2000W/m².
- N+2 Computer Room Air Conditioning (CRAC) units per data hall.
- CRAC units supply temperature control and floor pressure control.
- All CRAC units are fitted with dual power supplies.
- CRAC units fitted with high efficiency electronically commutated fans.
- All CRAC units are located in secured plant corridors outside the data halls.
- Average cold aisle temperature of 22 +/-2 degrees.
- Average cold aisle relative humidity of 50% +/- 15%.
- Building Management System (BMS) for monitoring of major mechanical systems.

FIRE SUPPRESSION AND MONITORING

- Inert gas fire suppression system.
- Leak detection systems.
- Emergency warning systems throughout the building.
- Water mist suppression system in DRUPS enclosures.
- Distributed fire alarm controls equipment to avoid single point of failure.
- 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 security personnel.
- Biometric fingerprint security for data centre access.
- Anti-cloning access card encryption.
- Secure lifts between floors.
- Intruder-resistant glass, steel mesh and solid concrete walls.
- Secure loading dock for deliveries.
- Extensive coverage of 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

- Dedicated area for potential future installation of onsite generation plant (such as tri-gen or other technologies) to significantly reduce CO₂ emissions.
- Energy efficient lighting (fluoro or LED) meeting AS1680.2.2 standard.
- Variable speed compressors, pumps and fans.
- External walls insulated to reduce heat transmission.
- Low volatile organic compound (VOC) materials and paint.
- Direct free air-cooling for data halls on the upper level.
- Target PUE is 1.3 at peak load.

TELECOMMUNICATIONS

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

CUSTOMER SERVICES

- Dedicated office space for long-term private use.
- Sound-proof boardroom.
- Quiet zone customer meeting room.
- 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

