



TECHNICAL SPECIFICATIONS

S1SYDNEY

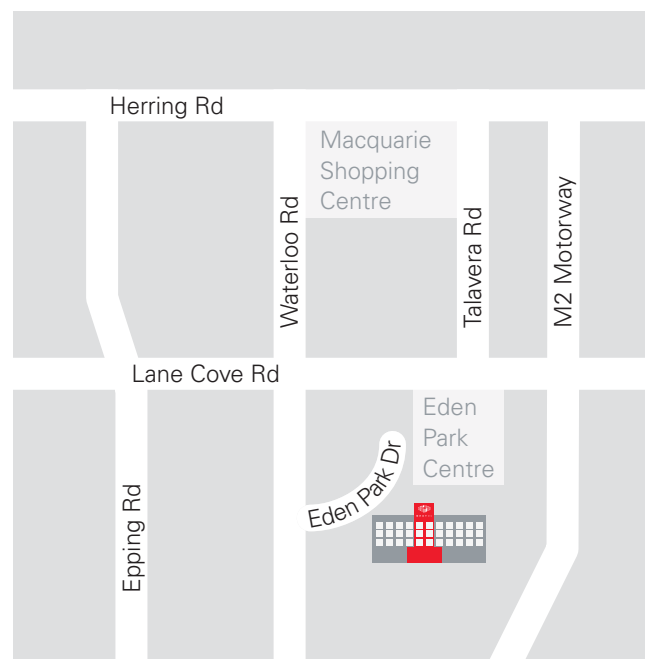
About **S1**SYDNEY

Situated in the Macquarie Park technology zone approximately 15km from Sydney's CBD, S1 has access to all major public infrastructure and telecommunications links. This enterprise-class colocation facility provides easy, on-demand access to major cloud platforms such as AWS, Microsoft Azure, Google Cloud, Oracle Cloud, IBM Cloud and Alibaba Cloud through AXON.

S1 has the Uptime Institute's Tier III certifications for design and constructed facility. With five storeys of enterprise-class colocation space, S1 showcases the very latest in data centre technology, delivering industry-leading reliability with 100% availability guaranteed.

BUILDING OVERVIEW

- Five storey 17,650m² building; two storeys dedicated customer space.
- Total technical space approximately 5,800m².
- 2,800 rack capacity.
- Average 1,450m² per data hall.
- Office and common areas approximately 1,450m².
- 1m raised floors in data halls and service corridors.
- Floor is reinforced concrete with 14.4kPa floor load capacity.
- Built to the Australian Earthquake Loading Standard AS1170. Importance Level 4 (IL4).



POWER

- Initial available power of 12MVA, increasing up to 20MVA.
- IT load capacity of approximately 14MW.
- 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 systems.
- Full N+1 main electrical infrastructure extending to N+N at power rail level.
- Ultimate 14+1, 1670kVA Diesel Rotary UPS [DRUPS] units on an Isolated Parallel bus for 100% no break IT and mechanical power.
- Diverse main feeders delivered at 11kV.
- Minimum 24 hours' onsite fuel supply.

COOLING

- N+1 high efficiency water cooled chillers, cooling towers 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.
- Water storage for cooling towers.
- 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%.

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

- Water cooled chiller technology with variable speed compressors.
- Indirect water-side free cooling.
- Rain water for cooling towers.
- Dedicated area for potential future installation of onsite generation plant (such as tri-gene or other technologies) to significantly reduce CO₂ emissions.
- Energy efficient lighting (fluoro or LED) meeting AS1680.2.2 standard.
- External walls insulated to reduce heat transmission.
- Variable speed compressors, pumps and fans.
- Direct free air cooling for data halls on the upper level.
- Low volatile organic compound (VOC) materials and paint.
- 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, massage chairs and Foxtel.
- Equipment staging room.
- Customer carpark.
- Spare parts vending machine.
- Guest Wi-Fi.

CERTIFICATIONS

