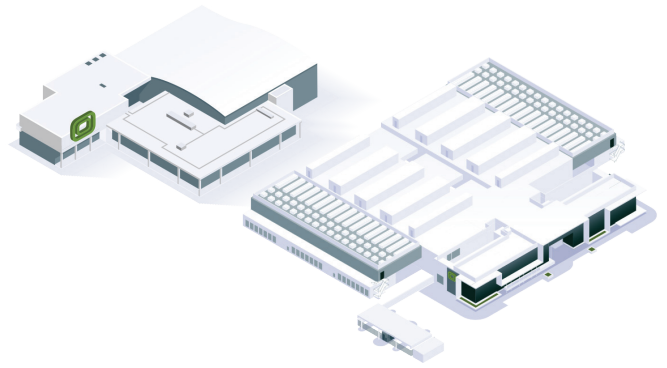


JB2 + JB4 BREDELL CAMPUS

Johannesburg, South Africa



Colocation Interconnection Peering Cloud Support Technical Monitoring Remote Hands

KEY ATTRIBUTES


TERACO'S BREDELL CAMPUS

With over **50,000 square metres of space** and master planned to provide more than **60MVA of available IT power**, clients at the Bredeell Campus have room to grow thanks to its world-class data centre infrastructure and network dense ecosystems. This facility provides vital access to content service providers, financial data, and cloud-based services, offering an efficient, secure, and resilient location for clients to address their increasing power and space needs.

Completed in November 2017, the Bredeell facility was the largest commercial data centre ever built in Africa. Completed in October 2022, Phase 1 of JB4 comprises 30 000 square metres of building structure and 19MVA of critical power load – Teraco has secured adjacent land and power for Phase 2 expansion. At the end-state, JB4 will comprise 60 000 square metres and service 50MVA of critical power load. Complete with sustainable water management systems, including rainwater harvesting and closed-loop cooling, this data centre features our most efficient mechanical cooling design to date.


 **50,000m²**
TOTAL SPACE

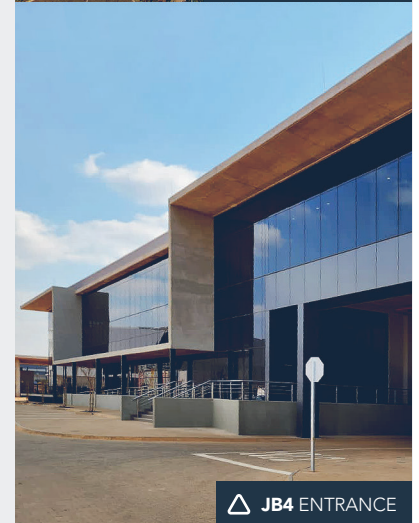
 **21,400m²**
WHITE SPACE

 **104MVA**
TOTAL POWER

 **N+1**
COOLING REDUNDANCY

 **N+1**
UPS REDUNDANCY

 **99,999%**
UPTIME



TERACO'S ECOSYSTEM

x7

REGIONAL
LOCATIONS

x6

DIVERSE INTERNET
EXCHANGE POINTS

200+

ENTERPRISE
CLIENTS

130+

IT SERVICE
PROVIDERS

250+

NETWORK
PROVIDERS

15+

GLOBAL CLOUD
ON-RAMPS

The world **connects here.**

TERACO[®]
A DIGITAL REALTY COMPANY

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▶ JB2 10km from OR Tambo Airport | 30km from the City Centre / JB4 15km from OR Tambo Airport | 35km from the City Centre

ENVIRONMENT

- Concurrently maintainable data centre designs with elements for fault tolerance built into asset levels.
- Energy efficient designs to meet industry standard Power Usage Effectiveness in line with ASHRAE n=20 parameters.
- Independent temperature monitoring at cabinet level automatically adjusts cooling units to avoid hot spots.
- Standard Service Level Agreement - Temperature controlled and maintained between 18°C and 27°C.
- Standard Service Level Agreement - Relative humidity maintained between 20% and 80%
- Data centre positively pressurised to ensure a dust-free environment, with dedicated anti-static mats.

SECURITY

- Comprehensive perimeter and building security - "zones within zones" for multiple levels of security.
- Pre-authorisation required for data centre access according to Teraco Access Policy.
- Visitor identity confirmed against pre-authorised list, with additional biometric confirmation through fingerprint imaging.
- Service areas physically separate from data centre areas.
- Continuous video surveillance.
- Comprehensive audit logs on all access.
- Additional bespoke access policies implemented for private cage colocation.

INFRASTRUCTURE

- Cabinets comprise of 47U racks.
- An additional 200mm of depth is added per cabinet, making each cabinet 1,200mm deep, allowing space for wiring, air flow and access

- Perforated front and back doors, allows for better air flow.
- All cabinets have unique locks, ensuring that only approved personnel are able to gain access.

POWER

- Utility power provided with as much infrastructure resilience as possible based on South African utility provider restrictions.
- Concurrently maintainable designs with elements of fault tolerance built into asset levels.
- Resilient diesel backup generators are fueled to provide a minimum of 48 hours of back up fuel under full load design conditions.
- Fuel scrubbers are installed to ensure fuel quality with periodic fuel sampling at registered laboratories.
- Power Distribution Unit (PDU) technology manages power to socket level within cabinets, in addition to remote management capabilities.
- Power is supplied in 1.1kVA increments. Higher power configurations are available.
- Detailed measurement and proactive notification of power usage are effected via a secure client portal.
- Reliability studies conducted with proven track record.

PROVISIONING

- Colocation is available in managed multi-tenant areas or private cages.
- Facilities are hardware vendor agnostic.
- Unrestricted choice of network operators or ISP's.
- Planned preventative maintenance performed in accordance with manufacturers' recommendations and industry best practices, with no interruption to services.

- Predictive maintenance is based on information collected through the building monitoring system (BMS).
- Remote Hands available 24/7.

CONNECTIVITY

- All major network operators present in the Carrier Hotel.
- Any point within the data centre can be connected to any other via multiple resilient routes.
- Cabling for single and multimode fibre.
- All cabling vendors are certified.
- All cabling is managed by structured cabling policies and is implemented by Teraco technicians to guarantee availability.

FIRE PROTECTION

- Pro-active fire monitoring systems linked to fire suppression system, incorporating best practice fire protection and prevention procedures.
- Multi-zone monitoring within all data centre plenums and the energy centres, inclusive of early warning systems.
- All monitoring and fire protection equipment fed via independent diverse power sources.
- Minimum 1-hour fire separation between various parts of the facility.

MONITORING

- Dual independent building monitoring systems (BMS) ensure concurrent maintainability.
- Alarms and early warning messages alert technicians on duty.
- All areas have 24x7 intelligent monitoring and video surveillance with integrated motion sensors.

Protect. Connect. Grow.

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