

# Isando, Johannesburg South Africa (JB1)

Teraco is South Africa's first provider of vendor neutral Data Centres. Teraco Data Centres offer a flexible, technically superior and physically safe environment, built and operated to global best practice. Customers benefit from unrestricted choice of network and service provider and an open market for interconnection to service providers and partners within the Data Centre. Teraco Data Centres are located on the fibre rings of the major licensed carriers in South Africa, including Telkom and Neotel, Broadband Infracore and Dark Fibre Africa all of which have fibre nodes within the building, presented in the Teraco "Meet Me" room.

Teraco Data Centre facilities provide security, fire protection, cooling and cable management according to a N+1 redundancy policy, with power provided according to a 2N redundancy policy allowing Teraco to offer Service Level Agreements guaranteeing 99.999% availability. Skilled technical staff ensures 24x7 support.



## Location

5 Brewery Street, Isando, Johannesburg  
**Multiple phases to 3800m<sup>2</sup>**

## Environment

- Multiple cooling zones with independent CRAC units, each with N+1 redundancy
- Temperature controlled at 25°C +/- 4°C
- Relative humidity 50% +/-5%
- Hot aisle containment
- Data centre positive pressure to ensure dust free environment
- Independent humidity and temperature monitoring in all plenums

## Security

- Comprehensive perimeter and building security, with 'zones within zones' for multiple levels of security
- Pre-authorization required for Data Centre access according to Teraco Access Policy
- Visitor identity confirmed visually against picture on named user list, with additional biometric confirmation by fingerprint
- Service areas physically separate from Data Centre areas
- Continuous video surveillance of all zones and cabinets
- Comprehensive audit logs on all access
- Additional bespoke access policies can be implemented for private cage customers

## Physical

- Cabinets are 19" racks and 47U high
- Additional 200mm depth per cabinet, making each cabinet 1200mm deep with space for wiring, air flow and access
- All cabinets have unique locks, ensuring that only approved personnel have access per zone area
- Perforated front and back doors, 86% air flow
- Site walls are 600mm thick

## Connectivity

- All major network operators present in Meet Me room (Carrier Hotel)
- Interconnect cabinets on each row in colocation area
- Any point in Data Centre can be connected to any other point via multiple routes
- Cabling for single and multimode fibre, Cat 6 UTP or GPO copper can be arranged
- All cabling vendors certified (CAT6 cabling is Molex certified)
- All cabling managed by structured cabling policies and by Teraco technicians only to guarantee availability

## Fire protection

- Pro-active fire monitoring systems and best practice fire protection and prevention procedures
- Multi-zone monitoring within all plenums
- Energy centre
- Diesel generators and tanks is physically separated
- Independent power for fire protection and monitoring equipment

## Monitoring

- Alarms and early warning messages alert technicians on duty. All areas have 24x7 intelligent monitoring and video recording with integrated motion sensing
- Unified building monitoring system logs all security and environment data

## Power

- Dual municipal power feeds into the building providing 2x4MVA power to the Data Centre
- N+1 diesel backup generators fuelled to provide 15 hours power at maximum load
- Diesel run time: we have enough diesel to run both generators for 36 hours @ 75% load and 27 hours @ 100% load
- Power cascaded to multiple redundant distribution boards servicing multiple zones
- Fully online UPSs ensuring frequency, voltage and surge stability
- Power Distribution Unit technology to manage power down to socket level within cabinets, with remote management to reduce the need to come to site
- Power supplied in 1.1KVA increments from 1.1KVA/cabinet upwards. High power configurations available up to 3.3KVA
- Detailed measurement and proactive notification of power usage via Secure Customer Portal

## Absolute Focus On Infrastructure, Service & Choice

- Teraco's sole business goal is provision of Data Centre facilities
- Colocation available in the managed customer area or a private cage for customer's sole use
- Customers can choose any server hardware or networking equipment
- Unrestricted choice of network operator, ISP or interconnect within facility
- Routine daily, weekly and monthly maintenance against checklists, without interruption to Data Centre services
- Remote Hands technician services available
- Open market of interconnectivity via network access points (NAPAfrica)
- Remote power management available