


DATA CENTER

KIO BOG1

KIO is an international company, founded in 2002, a provider of mission-critical Information Technology services that operates state-of-the-art Data Centers with the highest security, availability and density in Mexico, Colombia, Central America and the Caribbean. KIO hosts a robust and wide ecosystem of different industry sectors in the region within its Data Centers ensuring a professional, redundant, scalable and secure environment.

 4°40'28.8"N 74°09'18.2"W.

KIO BOG1 Data Center has a power capacity for IT and telecom equipment of 5.8MW with expansion capabilities on the adjacent land BOG2 to duplicate its capacity to 11.2 MW.

Located in the Free Trade Zone of Bogota, Colombia, 8 miles away from the downtown area of the city and 3 miles from the El Dorado International Airport of Bogota.

CHARACTERISTICS



DESIGN

4 story building with 4,977 m2 of construction, 2,352 m2 of space available in Data Halls in a 1st stage of the building and expansion capacity to double this space in a 2nd stage Anti-seismic construction.



ELECTRICAL CAPACITY

3 independent redundant 2.0 MVA BUS inputs, with sufficient capacity to provide uninterrupted power to all installed equipment. It has an advanced battery monitoring system.



REDUNDANCY

UPS 3 branches in parallel distributed, 3 additional UPS dedicated to the mechanical infrastructure. CRAH N+1, 3 generators of 1,650kW, distributed parallel DCC, granting a diesel autonomy of 40.5 hours.



ENERGY EFFICIENCY

High efficiency, redundant power system achieves a PUE of 1.4 at full load, with two different power supplies for each module, and has an indirect free cooling system, taking advantage of the environmental conditions of the city of Bogotá.



MONITORING

Real-time monitoring (BMS Honeywell) Closed-circuit high-definition video surveillance that allows facial recognition (TYCO).



NOC

There is an area prepared with Monitors to follow the Control and Monitoring of the BMS and CCTV Platform.



POWER SUPPLY / SERVICE DROP

In medium voltage of 10 MVA (34.5 kV).



QUALIFIED PERSONNEL

There are trained and qualified operating personnel 7x24x365 days of the year.



CARRIER NEUTRAL

All Telecom Carriers welcomed.

Azteca	Consult networks	MetroLan MPLS
Cirion	IFX (Ufinet)	Telefónica
Claro	Internexa	Ufinet
Cogent	Liberty	

Designed and built for the deployment of technologies that require low latencies for operations, with line available to connect **14 fiber networks**.



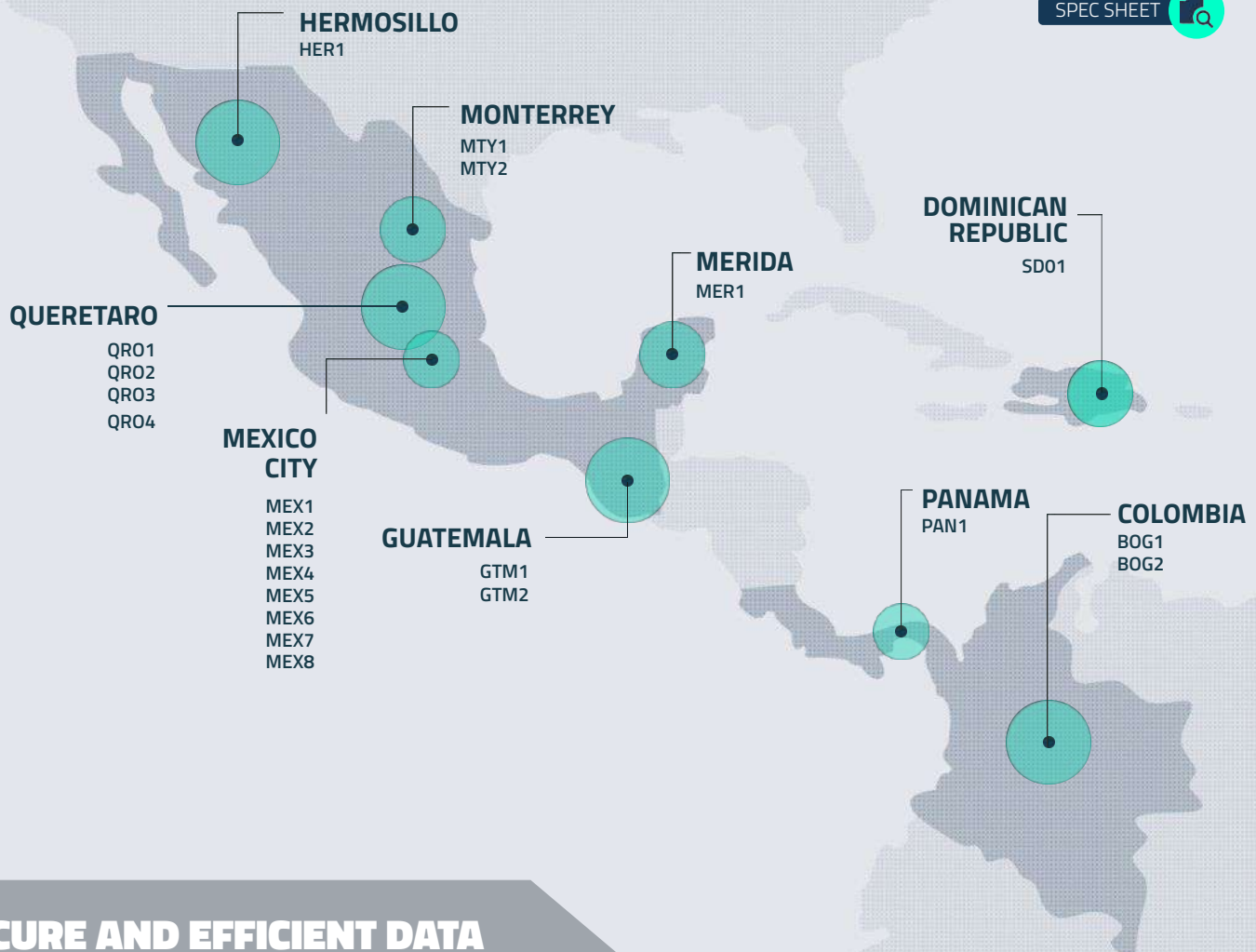
SECURITY

Three security rings, biometric access system with authentication to the clean zone and technical room corridor using HID iClass proximity card readers for access to technical rooms. CCTV monitoring. 24/7 security personnel. a 24/7.



FIRE PROTECTION

- Ultraviolet camera system for early detection of fires in the generator area.
- Particle increase detection system (VESDA) for early warning signals in critical areas.
- Automatic fire extinguishing system in all areas of the data center.
- All critical areas have 2-hour fire resistance walls, and the generator area has fire curtains.



GLOBAL, SECURE AND EFFICIENT DATA CENTERS FOR YOUR BUSINESS

PHYSICAL CHARACTERISTICS

+ Type of walls	Reinforced concrete
+ Wall thickness	13.9 a 15 cm (5.4 to 5.9 in)
+ Perimeter wall	Yes
+ Construction of perimeter wall	Reinforced concrete beam
+ Wheelchair access	Yes
+ Dedicated Data Center building	Yes
+ Distance to a police station	1,500 m (4,921 ft)
+ Distance to a fire station	350 m (1,148,29 ft)
+ Data Hall 1 technical floor area	195 m² (2099 ft²)
+ Data Hall 2 technical floor area	191 m² (2056 ft²)
+ Data Hall 3 technical floor area	195 m² (2099 ft²)
+ Data Hall 4 technical floor area	191 m² (2056 ft²)
+ Data Hall 5 technical floor area	195 m² (2099 ft²)
+ Data Hall 6 technical floor area	191 m² (2056 ft²)
+ MDA technical floor area	22 y 18 m² (72 y 59 ft²)
+ Raised floor - Concentrated load	5,570 N/m² 3,350 kgf/m²

+ Raised floor - Uniform load	33,000 N/m² 3,350 kgf/m²
+ Raised floor - Impact load	780 N - 79.5 kgf
+ Raised floor - Last load	16,680 N - 1,700 kgf
+ Separate room for UPS	Yes
+ UPS room with redundant air conditioning	Yes
+ Maximum cabinet capacity	76 racks per room (of 4 kW c/u) / 456 total racks
+ Space availability with perimeter cage	Sí
+ Height above sea level (meters)	2,670 m (8,759.84 ft)
+ Distance to the ocean (kilometers)	1,300 km

ELECTROMECHANIC CHARACTERISTICS (COOLER)

+ Number of total units	24
+ Number of redundant units	6
+ Tons of cooling for the Data Center	1,872



SECURITY

+ Access control	No locks, biometric reader
+ Authentication factors	Three (Biometric fingerprint + PIN + proximity card)
+ Visitor log	Yes
+ 7x24 Security personnel	Yes
+ Security cameras	Yes
+ Minimum DVR recording time	6 months, 180 days
+ Fire detection	VESDA + photoelectric point detector
+ Automatic fire extinguishing	Yes, NOVEC 1230 Clean Agent

POWER CHARACTERISTICS

+ Redundancy	N+1 distributed parallel
+ Availability	TIER III
+ Design capacity in sqm	1.55 kW / m2
+ UPS capacity	(6) 500 kVA IT (3) 600 kVA HVAC
+ Constant battery monitoring	Yes
+ Transformer capacity	(3) 2,000 kVA
+ Number of power connections	1
+ UPS autonomy time	12 minutes
+ Diesel autonomy time	41.3 hrs.
+ Total diesel tank capacity	(1.500 gal) 3 tanks daily + + (10.000 gal) main tank = 14.500 gal.
+ Number of generators	3
+ Total generator capacity	1,650 kW Prime DCC

COMMUNICATIONS

+ Cooper wiring	Category 6A or higher
+ Fiber wiring	Yes
+ Wire covering	Plenum and/or LSOH
+ Space for Carriers	Yes

CERTIFICATIONS

+ Uptime Institute Tier III Design and Construction	Yes
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