



# DATA CENTER | DO 1



**KIO Networks Group** is an international company founded in 2002 that provides critical mission information technology services and outsourcing services through cutting-edge Data Centers with the highest degree of security, availability and density, in Mexico, Central America, the Caribbean and Europe.

**KIO Networks** offers integrated ICT services and solutions to both the public and private sectors, with the support of more than 40 Data Centers in a safe, scalable and professional environment.

**KIO DO|1** started up operations in 2014, with a technology complex with TIER IV characteristics and certification.

**KIO DO|1** is located in the "Las Américas" Free Trade Zone in Santo Domingo, Dominican Republic.

## CHARACTERISTICS

**Design:** Computer room with an area of 223m<sup>2</sup>, reinforced floor with a height of 0.90m with earthquake-proof pedestals and hurricane-proof construction, and it has TIER IV characteristics and design certification.

**Electrical capacity:** The center has two 275 kVA UPS. They are redundant and they have sufficient capacity to provide uninterrupted and filtrated power to all of the equipment installed in the accommodation area for the phase. They also have an advanced battery monitoring system.

**Redundancy:** 2N in the electrical equipment, with two 450 kW emergency power generators, with two diesel storage tanks, providing 7-day autonomy. The cooling equipment has a 2N configuration.

**Power supply / Service drop:** Medium-voltage 13.2 kV power supply / service drop.

**Energy efficiency:** Cold aisle containment helping deliver an average PUE of 1.6.

**Carrier neutral:** Open invitation to all Carriers. The current Carriers are: Altice, Claro, Columbus Networks, Estrela, Wind Telecom, among others. KIO also has a high-speed interconnection network among its Data Centers.

**Security:** It has 5 security controls, including two-factor authentication (proximity and facial recognition biometrics) using a 7x24x365 Video Surveillance system with a 90-day storage capacity.

**Monitoring:** It has a Building Monitoring System (BMS) that monitors the efficiency and proper operation of the Data Center's electromechanical infrastructure.

**Fire protection:** It has smoke detectors, manual stations and audiovisual alerts in all areas, in compliance with the standards of the National Fire Protection Association (NFPA). A Very Early Smoke Detection Apparatus (VESDA) has also been installed, as well as a double interlock preaction system.

**NOC:** Advanced operations and network monitoring center.

**Qualified personnel:** There are trained and qualified operating personnel 7x24x365 days a year.

## CHARACTERISTICS



Type of walls	Reinforced concrete
Wall thickness	18 cm (7 inches)
Perimeter wall	Yes
Construction of perimeter wall	Reinforced concrete
Wheelchair access	Yes
Dedicated Data Center building	Yes
Distance to a police station	4 km (2.48 miles)
Distance to a fire station	300 m (0.18 miles)
Data Hall No1 technical floor area	223 m2 (2,400 ft2)
MDA A technical floor area	12 m2 (129.16 ft2)
MDA B technical floor area	15.22 m2 (163.82 ft2)
MPOE A technical floor area	13.2 m2 (142.08 ft2)
MPOE B technical floor area	12.45 m2 (134.01 ft2)
Raised floor - Concentrated load	567 kg (1,250 lb)
Raised floor - Uniform load	1,952.97 kg/m2 (400 lb/ft2)
Raised floor - Impact load	65 kg (150 lb)
Raised floor - Last load	2,222 kg (4,900 lb)
Separate room for UPS	Yes
UPS room with redundant air conditioning	Yes
Maximum cabinet capacity	108 approx.
Height above sea level (meters)	16 m (52.4934 ft)
Distance to the ocean (kilometers)	902 m (0.560 miles)

## SECURITY



Access control	Mantrap
Authentication factors	Two (Facial biometrics and proximity card)
Visitor log	Yes
7x24 Security personnel	Yes
Security cameras	Yes
Minimum DVR recording time	90 days
Fire detection	VESDA
Automatic fire extinguishing	Double interlock preaction

## COMMUNICATIONS



Copper wiring	Category 6A or Higher
Fiber wiring	Single mode and multimode
Wire covering	Plenum and / or LSOH
Space for Carriers	Yes

## POWER CHARACTERISTICS



Redundancy	2N
Availability	Uptime Institute TIER IV Design
Design capacity in m2	1 kW / IT
UPS capacity	275 kVA
Constant battery monitoring	Yes
Transformer capacity	500 kVA
Number of power connections	1
UPS autonomy time	10 minutes
Diesel autonomy time	7 days
Total diesel tank capacity	22,712 liters (5,999.8757 gal)
Number of generators	2
Total generator capacity	450 kW

## CERTIFICACIONES



ISO 37001	Uptime Institute
SSAE18 (SOC 1)	TIER IV Design
PCI DSS	



## ELECTROMECHANICAL CHARACTERISTICS (COOLING)



Number of total units	4
Number of redundant units	2
Tons of cooling for the Data Center	160

