



# CENTRO DE DATOS GT | 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 its more than 40 Data Centers in a safe, scalable and professional environment.

**KIO GT | 1** started up operations in 2013 and has a technology complex with an area of 2,500 m<sup>2</sup>, and boasts the country's most modern, robust and high-capacity Data Center. It has TIER IV characteristics and design certification.

**KIO GT | 1** is located at: 8<sup>a</sup> Avenida 19-54, Condado el Naranjo, Zona 4 de Mixco, Guatemala, Guatemala.

## CHARACTERISTICS

**Design:** Has a computer room with an area of 174 m<sup>2</sup>, with a false floor with a height of 0.90 m reinforced with earthquake-proof pedestals.

**Electrical capacity:** Has two 250 kVA UPS that are redundant and 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 kVA 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:** KIO has indirect Free Cooling, which allows it to save power in the cooling system when the humidity and temperature conditions are ideal, helping it achieve a design PUE of 1.6.

**Carrier neutral:** Open invitation to all Carriers. The current Carriers are: Blue Net, Broadcom, BT, Cable & Wireless, Claro, Comment, Innova, Optel, Telefónica, Tigo, Ufinet, among others. KIO also has a high-speed interconnection network among its Data Centers.

**Security:** There are 5 two-factor authentication (proximity and facial recognition biometrics) controls, with a 7x24x365 Video Surveillance system with a 90-day storage capacity. The center has received Payment Card Industry Data Security Standard (PCI) certification.

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

**Fire protection:** Has smoke detectors, manual stations and audiovisual alerts in all areas, in compliance with the standards of the National Fire Protection Association (NFPA), as well as a Very Early Smoke Detection Apparatus (VESDA) and 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	9 cm (3.45 inches)
Perimeter wall	Yes
Construction of perimeter wall	Reinforced concrete
Wheelchair access	Yes
Dedicated Data Center building	Yes
Distance to a police station	2.8 km (1.73 miles)
Distance to a fire station	20 m (65.61 ft)
Data Hall No1 technical floor area	174 m <sup>2</sup> (1,872.92 ft <sup>2</sup> )
MDA A technical floor area	6 m <sup>2</sup> (64.58 ft <sup>2</sup> )
MDA B technical floor area	8 m <sup>2</sup> (86.11 ft <sup>2</sup> )
Raised floor - Concentrated load	567 kg (1,250 lb)
Raised floor - Uniform load	1,952.97 kg/m <sup>2</sup> (400 lb/ft <sup>2</sup> )
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)	1,560 m (5,118.11 ft)
Distance to the ocean (kilometers)	120 km (74.56 miles)

## SECURITY



Access control	Mantrap
Authentication factors	2 (Facial biometrics and proximity card)
Visitor log	Yes
7x24 Security personnel	Yes
Security cameras	Yes
Minimum DVR recording time	90 day
Fire detection	VESDA
Automatic fire extinguishing	Double interlock preaction

## COMMUNICATIONS



Copper wiring	Category 6A or higher
Fiber wiring	Single and multi-mode
Wire covering	Plenum and / or LSOH
Space for Carriers	Yes

## POWER CHARACTERISTICS



Redundancy	2N
Availability	Uptime Institute TIER IV Design
Design capacity in m2	1.2 kW / IT
UPS capacity	250 kVA
Constant battery monitoring	Yes
Transformer capacity	500 kVA
Number of power connections	1
UPS autonomy time	11 minute
Diesel autonomy time	7 days
Total diesel tank capacity	11,356 liters (2,999.93 gal)
Number of generators	2
Total generator capacity	450 kVA

## CERTIFICATIONS



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

