


DATA CENTER

# KIO MEX|5


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.


 19°37'41.4"N 99°8'55.2"W


**KIO MEX|5** joined the KIO portfolio in 2014, with a technological complex with **TIER III** characteristics and certification.


Located in the Mexico City Metropolitan Area at: Blvd. Benito Juarez 20, corner Av. López Portillo, Colonia San Mateo Cuauhtepc, Tultitlan, State of Mexico 54948.

## CHARACTERISTICS


 **DESIGN**  
8,000 m2 of white floor with 6,848 m2 dedicated to 8 data halls, it has a 1 m high false floor with anti-seismic pedestals.


 **ELECTRICAL CAPACITY**  
Thirty-two 600 kVA UPS that are redundant and have sufficient capacity to provide uninterrupted power to all of the installed equipment. They also have an advanced battery monitoring system.

 **REDUNDANCY**  
2N in the distribution from the UPS to the load point, with twelve 2,400 kW generators in an N+1 configuration that have diesel storage tanks providing 7-day autonomy.

 **ENERGY EFFICIENCY**  
KIO Green with renewable energy and indirect and direct 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.

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

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

 **POWER SUPPLY / SERVICE DROP**  
3 power connection supplies / service drops, two of which are 7.5 MVA delivered through two routes, underground and through the air for critical loads, and a third 2 MVA connection for general services.


 **QUALIFIED PERSONNEL**  
There are trained and qualified operating personnel 7x24x365 days a year.

 **CARRIER NEUTRAL**  
Open invitation to all Carriers.  
The current Carriers are:

Arelion	Cirion	Neutral Networks
ATC	Cogent	Telmex
AT&T	Flō Networks	Total Play
Axtel/Alestra	Izzi	Vivaro
Bestel	MCM (Megacable)	Zayo
C3ntro	Metrocarrier	

Additionally, **KIO** has a high-speed interconnection network between its Data Centers and connects with others through **DE-CIX**.

 **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.

 **FIRE PROTECTION**  
It has smoke detectors, manual stations and audiovisual alerts in all areas. Has a fire suppression system with a clean agent, as well as a Very Early Smoke Detection Apparatus (VESDA) and a double interlock preaction system.



## GLOBAL, SECURE AND EFFICIENT DATA CENTERS FOR YOUR BUSINESS

### PHYSICAL CHARACTERISTICS

+ Type of walls	Reinforced concrete
+ Wall thickness	20 cm (7.87 inches)
+ Perimeter wall	Yes
+ Construction of perimeter wall	Reinforced concrete
+ Wheelchair access	Yes
+ Dedicated Data Center building	Yes
+ Distance to a police station	3 km (1.86 miles)
+ Distance to a fire station	5 km (3.10 miles)
+ Data Hall No1 technical floor area	1,073 m2 (11,549.67 ft2)
+ Data Hall No2 technical floor area	1,073 m2 (11,549.67 ft2)
+ Data Hall No3 technical floor area	870.51 m2 (9,370.09 ft2)
+ Data Hall No4 technical floor area	931.65 m2 (10,028.19 ft2)
+ Data Hall No5 technical floor area	9659.83 m2 (7,102.35 ft2)
+ Data Hall No6 technical floor area	659.83 m2 (7,102.35 ft2)
+ Data Hall No7 technical floor area	743.17 m2 (7,999.41 ft2)
+ Data Hall No8 technical floor area	806.25 m2 (8,678.40 ft2)
+ MDA A technical floor area	62.51 m2 (672.85 ft2)
+ MDA B technical floor area	58.06 m2 (624.95 ft2)
+ MPOE A technical floor area	60 m2 (646 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	68 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	3,478 aprox.
+ Availability of space with perimeter cage	Yes
+ Height above sea level (meters)	2,235 m (7,332.67 ft)
+ Distance to the ocean (kilometers)	250 km (155.34 millas)
+ MPOE B technical floor area	40 m2 (430 ft2)

### ELECTROMECHANICAL CHARACTERISTICS (COOLING)

Number of total units	30
Number of redundancy units	4
Cooling tons	2,850



## SECURITY

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

## COMMUNICATIONS

+ Copper wiring	<b>Category 6A or higher</b>
+ Fiber wiring	<b>Single mode and multimode</b>
+ Wire covering	<b>Plenum y/o LSOH</b>
+ Space for Carriers	<b>Yes</b>
+ Site Entry	<b>Yes</b>

## POWER CHARACTERISTICS

+ Redundancy	<b>2N</b>
+ Availability	<b>UI Tier III</b>
+ Design capacity in m2	<b>1 kW / IT</b>
+ UPS capacity	<b>(32) 600 kVA</b>
+ Constant battery monitoring	<b>Yes</b>
+ Transformer capacity	<b>2,500 kVA</b>
+ Number of power connections	<b>3</b>
+ UPS autonomy time	<b>6 minutes</b>
+ Diesel autonomy time	<b>7 days</b>
Total diesel tank capacity	<b>203,562 liters (53,852 gal)</b>
+ Number of generators	<b>7</b>
Total generator capacity	<b>2,750 kW</b>

## CERTIFICATIONS

+ ICREA Level V (DataHall 3)	<b>ISO/IEC20000-1:2018</b>
+ ICREA Level IV (DataHall 1/2)	<b>ISO/IEC27001:2013</b>
+ CERDA GOLD	<b>ISO/IEC 22301:2015</b>
+ PCI DSS	<b>ISO/IEC 37001:2012</b>
+ SAE 18 (SOC 1)	<b>ISO/IEC 37001:2016</b>
Uptime Institute Tier III Data Hall 3 (Design)	<b>Uptime Institute Tier III Data Hall1 &amp; 2 (Design &amp; Construction)</b>

