

Safe use of gas



Gas safety is an important aspect of gas networks. Pipeline corrosion, gas leaks, excessive pressure and temperature, and dangerous customer behaviors are issues that require remote monitoring to quickly resolve.

Fair use of gas



Smart gas IoT allows you to visualize what's happening inside your pipeline – whenever and wherever you want. Meanwhile, with more information acquired through meter-end, APP and internet, users are more aware of their energy consumption.



Smart use of gas

Get real-time data with prioritized alarms and full data analysis that allow both the utility companies and users investing and using gas more efficiently.



High/Low Voltage
Alarm then close valve



Close valve
when Power off



Close Valve when strong
Magnetic Interference



Long-term
un-consumption
Close valve



Abnormal Flow Rate
Alarm then close valve



Abnormal
Continuous Flow
Alarm then Close
Valve



Close valve when
 $1.2Q_{max}$



Flow Rate
Monitoring



Shut-off Valve
when gas
leaking



Remote Valve
Control

IOT Smart Gas Meter Functions

Safety Management

Anti-explosive

- Long term non-usage shutoff
- Abnormal tiny flow shutoff
- Overtime continuous flow shutoff
- Overflow shutoff
- Abnormal large flow shutoff
- Over 1.2Qmax flow shutoff
- Gas leakage shutoff
- Remote shutoff
- Safe re-set

Information Security

- Meter-end
- Communication
- Systems

Smart Management

- Remote re-charge
- Remote meter reading
- Remote valve control
- Remote lock/unlock valve
- Remote ladder pricing
- Remote time-of-use pricing
- Remote prepayment
- Remote query
- Daily data transmit
- Failure shutoff
- Metrological info management

- Valve failure reminding
- Shutoff records and query
- Remote shutoff preset
- Remote ladder pricing preset
- Maximum flow preset
- Continuous usage changing
- Low battery display and shutoff
- Meter reading date preset
- Status display
- Time synchronization
- Data logger for readings, alarms and events

Intelligent Protection

- Low gas pressure shutoff
- Magnetic interferences shutoff
- High/low voltage shutoff
- Input outer alarm info and shutoff



LoRa(LoRAWAN)
Smart Gateway



LoRa(LoRAWAN)
Application Server



LoRa(LoRAWAN)
Management Software

LoRaWAN™





Key Parameters	LoRa(LoRAWAN)
Techniques	Spread Spectrum
Network Deployment	Independent Station
Network Mode	Star Network
RF Band	EU 868 Mhz
Transmission Bandwidth	125khz-500khz
Indoor Penetration Capability	8dBm link boost
Transmission Distance	Visual distance 3 km
Rate	<300kbps
Number of Connections	2000-3000/hub
Meter TX power	14dBm
Meter RX sensitivity	LoRa -148dBm
Meter TX current	130mA
Meter RX current	10mA
Gateway TX power	0.5w
Gateway	Needed
Link Robustness	148dBm

DASHBOARD

CONNECTION Mgnt. ▾

CONNECTION Admin. ▾

PROCESS Mgnt. ▾

MAINTENANCE ▾

MASTER ▾

USER Mgnt. ▾

REPORTS ▾

LOG OUT

Smart GAS Meter

Home - Dashboard

CONNECTION Stats

Total SMART Connections



3

Residential



1

Commercial



5

Zones

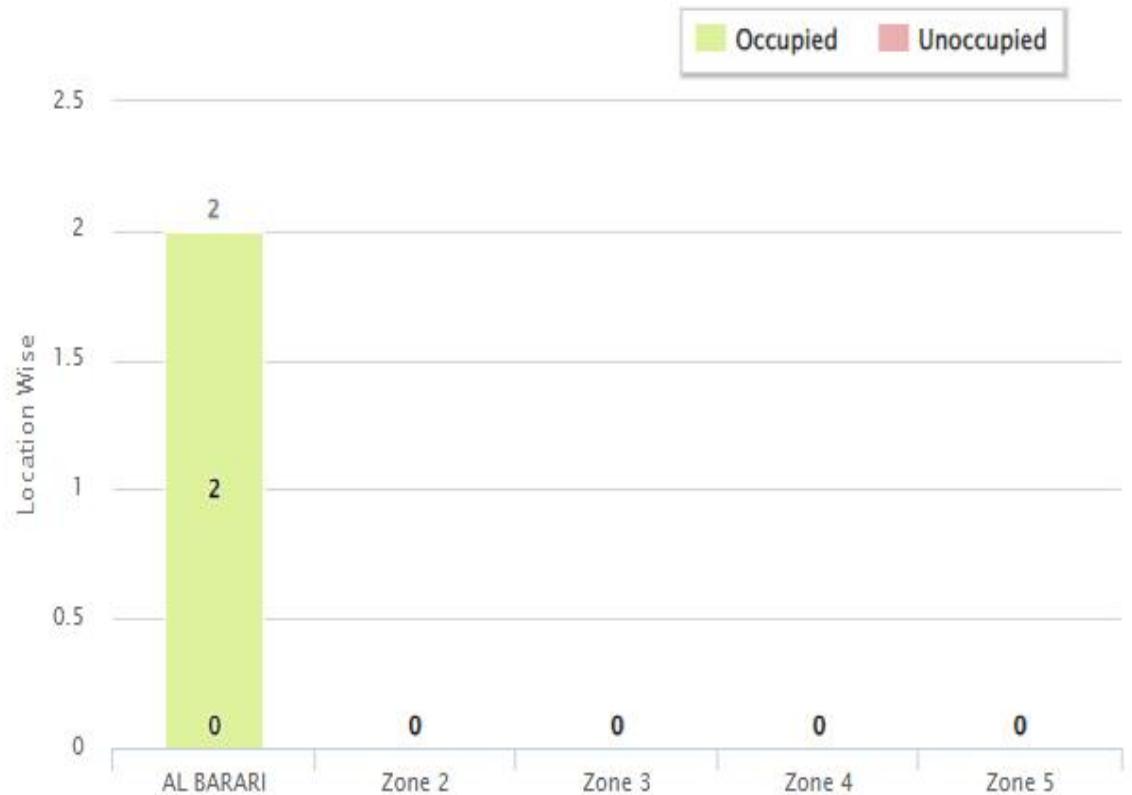


3

Groups

COMMUNITY Overview

Occupied Vs Unoccupied





DASHBOARD

CONNECTION Mgnt. ▾

CONNECTION Admin. ▾

PROCESS Mgnt. ▲

• METER MANAGEMENT

• STATUS - LIVE

• STATUS - BASE

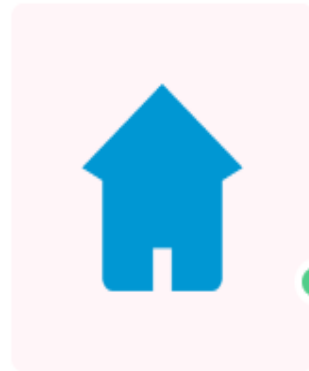
MAINTENANCE ▾

MASTER ▾

USER Mgnt. ▾

REPORTS ▾

LOG OUT



AKINFOS TEST 80327

LoRaWAN

Active

REFRESH

LIVE

AI BARARI

support@akinfos.com

A
CLASS

Postpaid
MODE

Open
VALVE

01 Hr.
Rpt. Period

BATTERY Onboard

100%

Overview

Signal Strength

Settings

Activity

Profile Details

Full Name AKINFOS TEST 80327

Contact Phone 00971555074996 Verified

Email support@akinfos.com

OUTSTANDING FEATURES

of IoT Smart Gas Meter

Real-time
Bi-directional
Communication

12 Safe Shut-off
Remote control

Leakage
Notification

Transparent
Billing

Integrated
Resource
Management

12+ year
Battery life



OFFICE NO. 6, MEZZANINE FLOOR,
AL RAMOOL OASIS BUILDING,
UMM RAMOOL, DUBAI, UAE.



+971 50 52 54520



support@akinfos.com



AK INFOS
www.akinfos.com

Thank
You