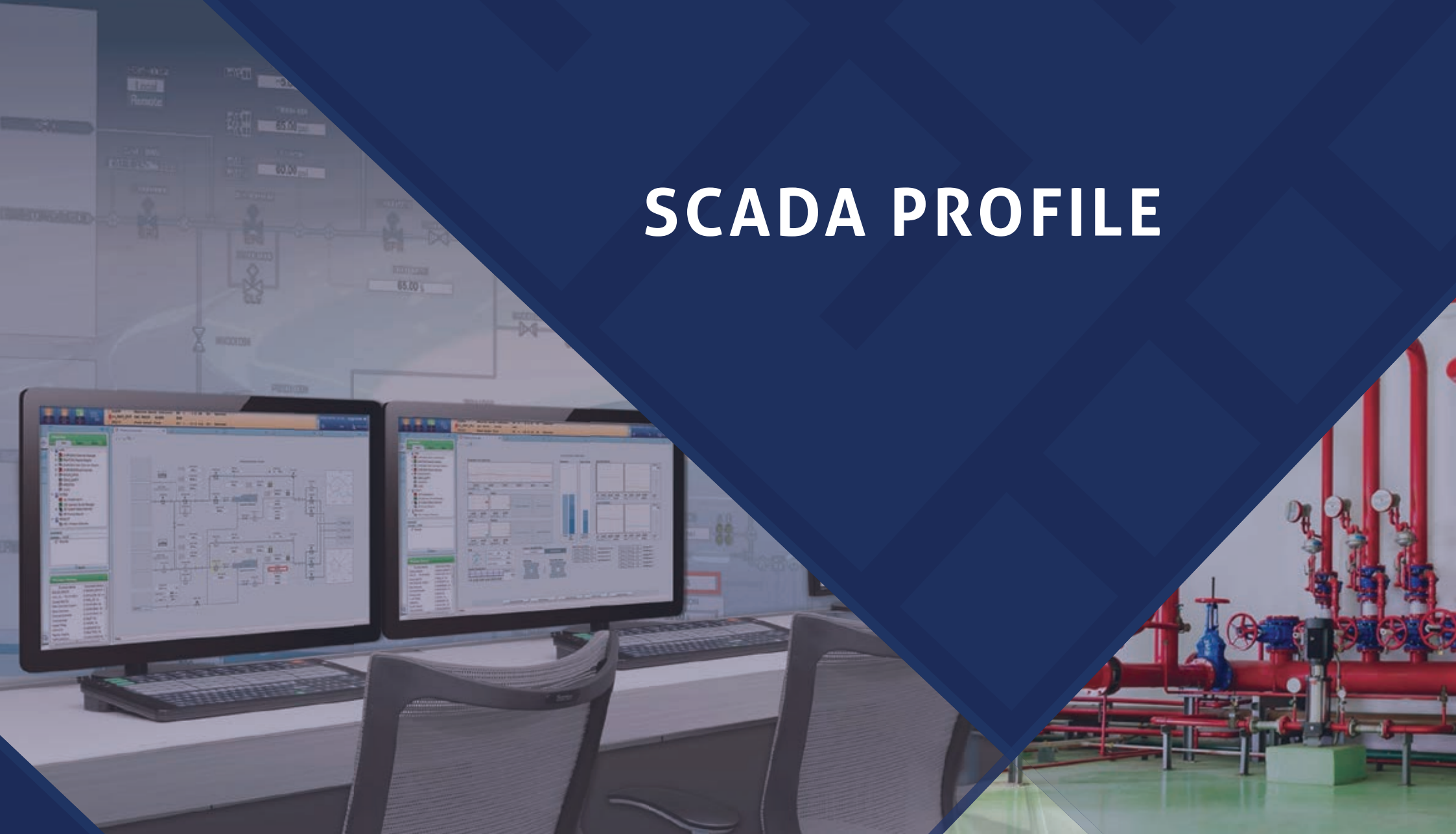


# SCADA PROFILE



# CONTENT

- 03 Who we are
- 04 Team
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- 15 Contacts





# WHO WE ARE

Kamal Al Khateeb for Maintenance and Construction Est. - KAK - was established in 1995 as logistic services provider. To meet vast demand of the market of construction industry KAK expanded its business scope to the field of project management, per-engineering design, structural, electromechanical and supply of industry related products.

KAK also is a solution provider of automation, processes control and SCADA systems . From design, installation, testing, commissioning to maintenance and operation we offer full spectrum of services to construction sector .

We are in partnership with KYBERTEC, Ltd. one of the leading control systems integrator in Europe. We also cooperate with brands like Schneider Electric, SIEMENS, Honeywell ,GE-FANUC, YOKOGAWA, Analytical Technology, Dryer Master and others .

# OUR TEAM

We pride ourselves on the highly skilled and motivated engineers that we have . We have a highly skilled and multi-disciplined team of engineers and technicians with a wealth of industry knowledge and expertise. They always work in partnership with clients to provide optimum solutions that are tailored to meet their specific needs.

Our highly educated and certified team is able to offer complete solutions in the field of industrial automation and process control, starting with the basic project design, through complete equipment delivering and assembling, to on-site services, start up and customer training. We can also offer consultant services in this field.

## *Safety*

*We pays particular attention to the safety aspects associated with the activity of our staff, in compliance with the rules of law and the relevant regulations in force in the customer 's safety policies*



# VALUED SERVICES

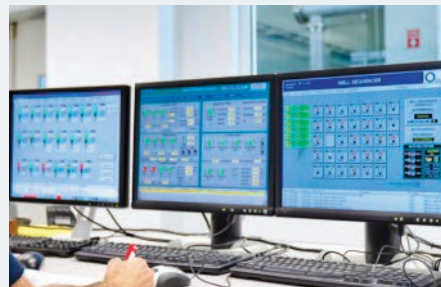
KAK provide a full comprehensive range of package instrumentation controls and automation systems to general, commercial, industrial, medical buildings to meet clients' needs. Our projects and technical team of more than 10 years of extensive experience and ability to provide specialist services in design and build, construct, install, test, commission and operate and maintain the PLC Controls, Telemetry and Supervisory Data Acquisition ( SCADA ) Systems for all types of controls and monitoring process.

## 1 Design & Engineering



- Intelligent SCADA for Building
- SCADA for Hospital and Healthcare
- SCADA for Commercial facilities
- Remote Building Automation
- SCADA software
- Mimic & Graphic Design

## 2 Installation & Configuration



- Measurement Devices
- LED lighting control
- BIM (Building Information Modeling)
- Remote monitoring and control
- Process Control System (PCS)
- Emergency Shutdown System

## 3 Testing & Commissioning



- Fire & Gas Detection System
- PLC and DCS Controllers
- Public Address / Alarm System
- PC Based Industrial Automation
- Industrial information systems
- Industrial communication devices

## 4 Maintenance & Operation



- Industrial Computer System
- Embedded Systems & Device
- Integrated Control & Safety System
- Power and Energy Monitoring
- Field Devices
- Wireless instrumentation



# SCADA FOR BUILDINGS

SCADA includes all BMS system functionality  
+ more open , based on industrial standards

Economy, safety and efficiency are of considerable importance in buildings management and maintenance . Strict regulations, ever-changing technology, and continuous health and safety requirements need to be accommodated. We offer integrated building, energy, security and safety management SCADA system that can help make for productive, innovative facilities.

## We offer systems for

- Commercial and office building
- Banks and financial centers
- Shopping malls and supermarkets
- Hospitals and healthcare facilities
- Schools , colleges and universities
- Hotels and resorts
- Governmental buildings
- Airports and transport stations
- Convention and exhibition centers
- Industrial building and warehouses
- Residential complex
- Sports and stadiums buildings

## System Applications

Illumination (lighting) control  
Electric power control  
Heating, Ventilation and AC (HVAC)  
Access control systems  
Fire alarm system  
Lifts & elevators  
Plumbing  
Closed-circuit television (CCTV)  
Public addressing ( PA )system  
Alarms Monitoring  
Security Automation

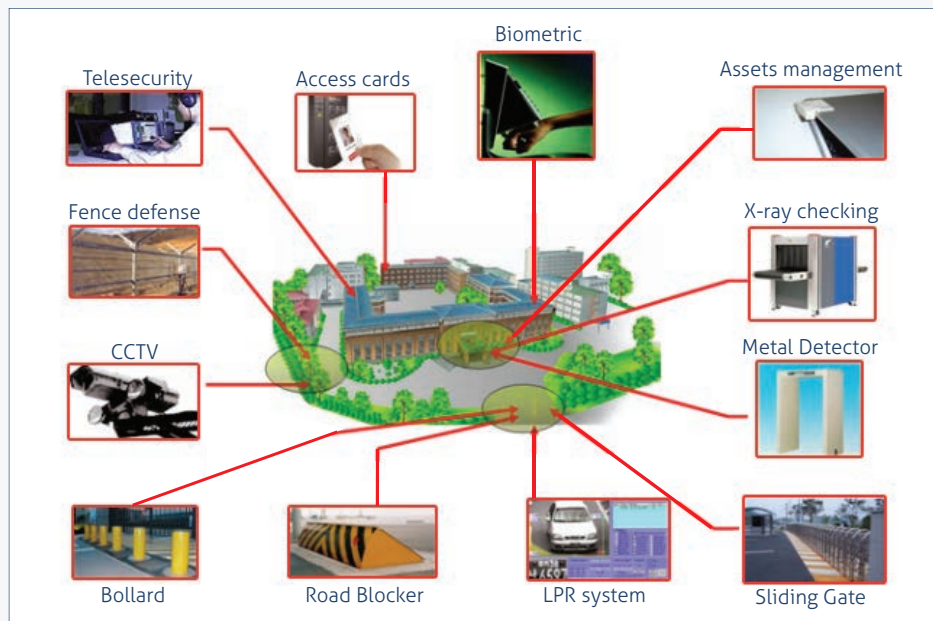
Large Enterprise  
Building Management



Access from PC, Web, Tablets  
& Smart-phones

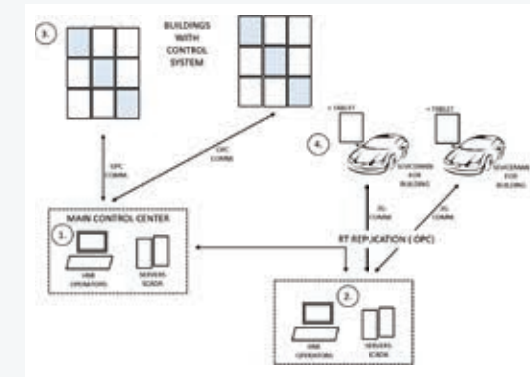
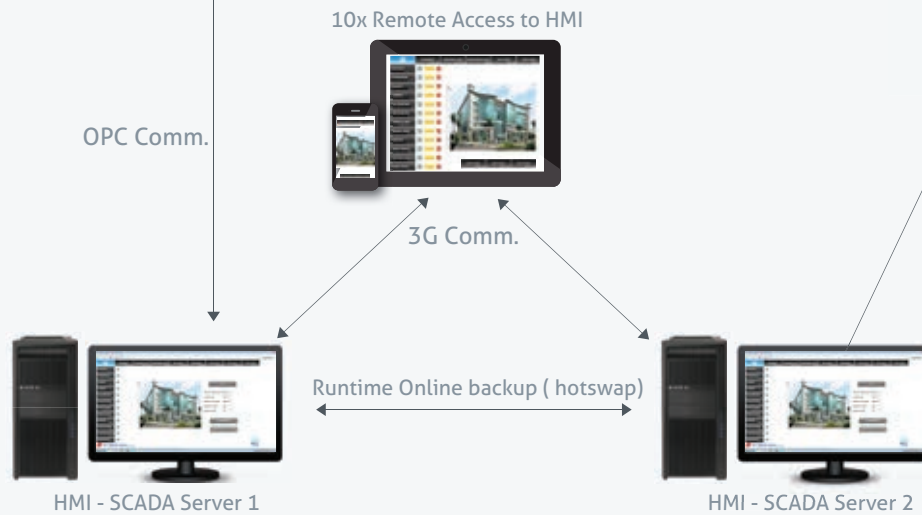
# UNIQUE FEATURES

- Easy, intuitive and quick to learn
- Development 2-3x quicker than in competitive products
- Save time = Save money
- No programming for basic functions (just parametrize)
- Other programmers can understand the visualization
- Complete environment - no additional fees for extension modules
- Multi-language projects + UNICODE characters (Asia)
- Network IP cameras support (Axis, Vivotek)
- Great application diagnostic
- Direct access to the SQL databases
- OPC Server available for Reliance (open system)
- Web services available for integration with MES, ERP
- Post mort – recording and replaying of process history
- Cross-platform OS (Windows, Linux, Unix)
- Easy deployment : PC, Web Client, Mobile devices (PDA)
- Quick and high-quality technical support
- Highly competitive price
- Easy upgrades in the future – just over email (no need to return keys)



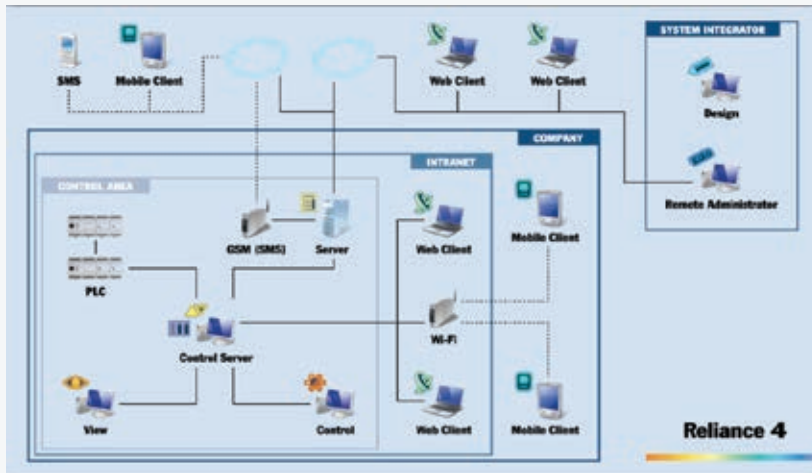
# SCADA FOR BUILDINGS

## System overview

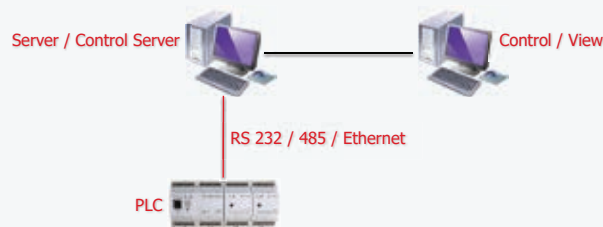




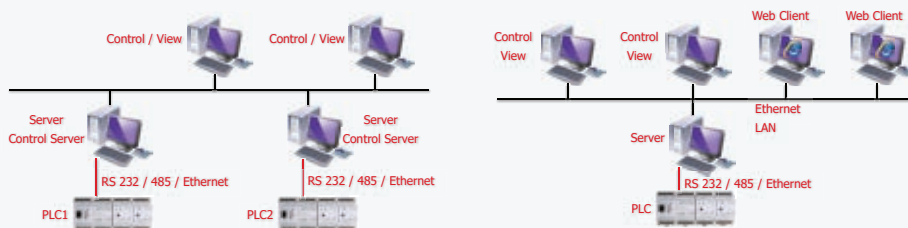
# Configuration examples



## Simple local configuration



## Client / Server configuration



# System Structure

## Development Environment:

- Reliance Design Desktop,
- Reliance Design Enterprise,

## Runtime modules:

- Reliance View,
- Reliance Control,
- Reliance Server,
- Reliance Control Server.

## Thin clients:

- Reliance Web Client,
- Reliance Mobile Client

## Native communication drivers:

- OPC servers,
- DDE servers,
- COM/DCOM/Active X
- Generic driver

## OPC servers:

- OPC = OLE (Object Linking and Embedding for Process Control),
- Reliance includes OPC Client functionality.
- GEOVAP is the OPC Foundation member,
- GEOVAP develops OPC servers,
- [www.matrikon.com](http://www.matrikon.com),
- [www.foxon.cz](http://www.foxon.cz),
- [www.opcfoundation.org](http://www.opcfoundation.org).

## Native drivers for PLCs

### (ALL WITH OPC of course):

- Modicon (Modbus),
- WAGO,
- Sauter EY2400,
- Tecomat,
- Rittmeyer WSR3000,
- Johnson Controls DX9100, SC9100, FX15,
- Inmat,
- Promos,
- M-Bus,
- IEC 60870-5-101/104,
- AMiT

## Native drivers for telemetry devices (RTU):

- IEC 60870-5-101/104,
- ELCOR-94 (gas volume correctors),
- ELGAS 2 protocol (ELCOR2, µELCOR2, DATCOM2).

## Native drivers for GSM modules:

- integration of GSM modules into the control system,
- interactive communication using SMS,
- GSM terminals of Siemens, Wavecom (Sierra Wireless).
- any GSM terminal is possible to use (AT commands).

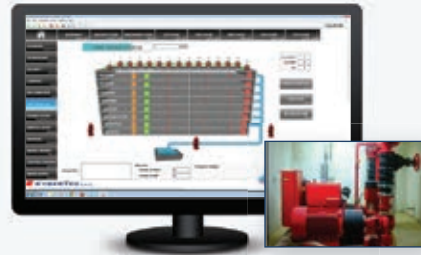
# SCADA FOR BUILDINGS

## Monitor & Control features

Elevators



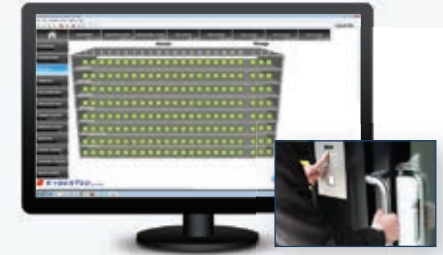
Fire fighting



Air conditioning



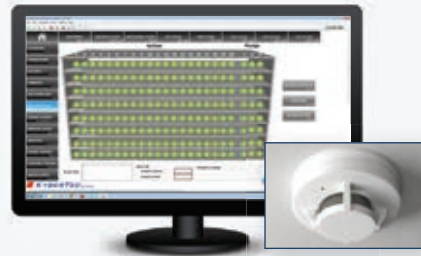
Security



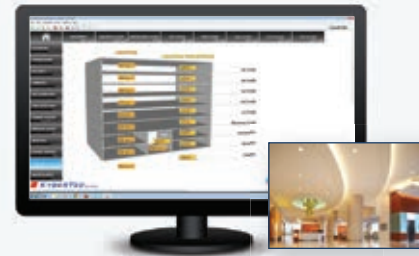
Power systems



Fire detection



Lighting control



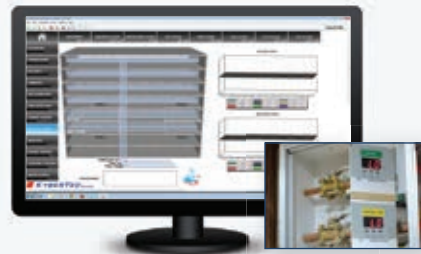
Store rooms



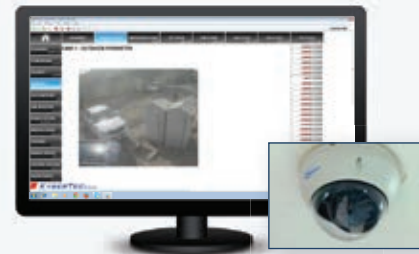
Water supply



Medical Gases



Cameras



Weather



# Reporting



Energy reports



Room overview



Room report



Staff report



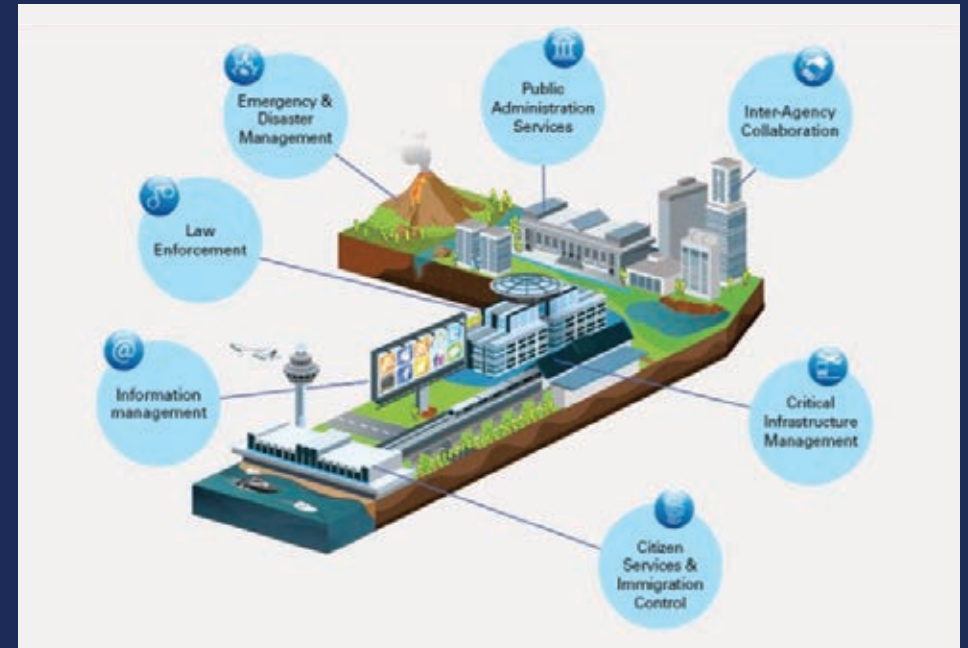
Equipment overview



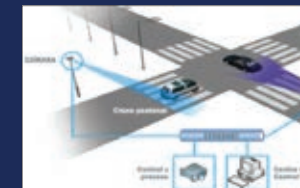
Equipment summary



# SCADA FOR SMART CITIES



Smart city SCADA utilize complex network of digital technologies and ICT infrastructure to manage various city systems and services. SCADA improves efficiency of infrastructure ; optimizes traffic using integrated mobility management and improves transportation in cities.





# SCADA FOR INDUSTRY

As full-service system integrator KAK provide services on all aspects of SCADA for industrial sector . Whether you are in the planning stage, implementation stage, or if you need to add a single application, replace an entire system, migrate a system, or put in your first SCADA system, we can help you .

## **Our services for industry includes :**

- FEED and feasibility studies
- Project Management
- SCADA system recommendations
- Reverse engineering services
- SCADA system validation services
- Network and communication systems design
- Functional design, configuration, testing, commissioning and tuning
- Electrical systems and cabling design
- Hardware supply and installation
- System support and maintenance
- Documentation and training

## **Main industries served :**

- Water treatment and distribution
- Wastewater collection and treatment
- Oil and gas process
- Electrical power transmission and distribution
- Transportation and terminals automation
- Manufacturing and process control

# CORE SERVICES

## System Design & Validation

Functional design, optimum performance and reliable system integration are the result of a thoroughly planned project at its inception. KAK engineers work directly with owners, engineers and contractors during the system design phase to ensure cost effective and workable system solutions.

## Communications & Telemetry solutions

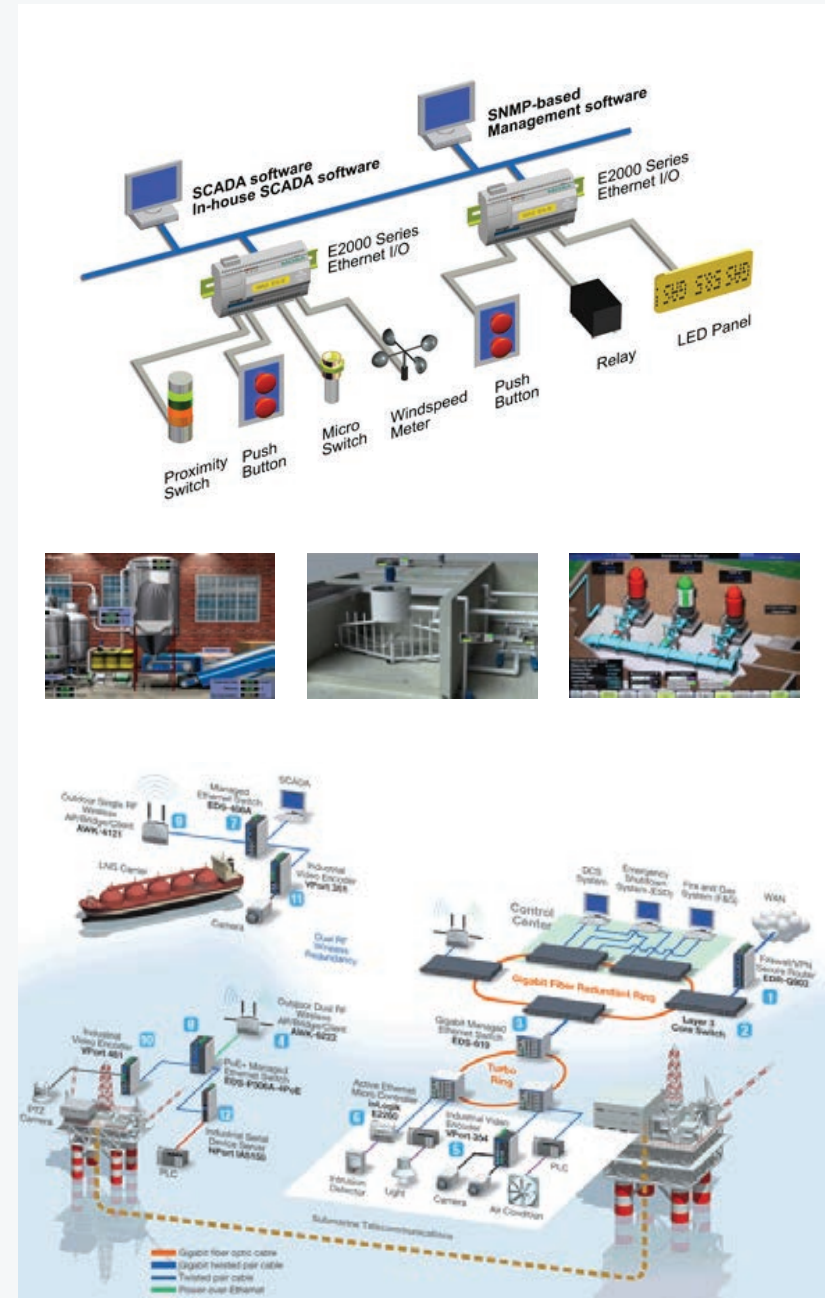
Well-engineered communication systems are a critical requirement for reliable SCADA and process control systems. KAK can help you design, implement, and maintain your communication infrastructure to provide secure, robust, and fault-tolerant system architectures.

## Systems integration

Our methodology and wide knowledge base allows for innovative solutions, which take into account RTU/PLC communications topology, LAN and WAN configuration, state-of-the-art hardware technologies, and currently available and widely-supported operating system and application software platforms.

## System Commissioning

KAK uses a standardized approach to commissioning systems to ensure that the system performs as expected and per project requirements. These standards can be tailored to the specific needs of the project.



# CORE SERVICES

## SCADA & PLC integration

PLC and SCADA systems play a vital role in the modern industrial and automation environment. From the individual PLC controlling a discrete plant to a site wide integrated PLC and SCADA system KAK is able to provide a total PLC and SCADA system solution. KAK having excellent knowledge with a large number of market-leading manufacturers and vendors .

## Hardware and RTU supply

Our experienced team works with you to design, source, install and monitor complete SCADA product solutions including Remote Terminal Unit (RTU) control panels with point-to-point or point-to-multi-point communication and all types of devices

## Support and maintenance

KAK also offer maintenance packages tailored to each client need including instruments calibration , preventive maintenance , equipment support , system tuning , emergency and 24/7/365 Support service.

## Our suppliers

Whilst not aligned to any particular vendor KAK can provide independent and objective advice to provide the best solution to resolve process control problems. We we have detailed knowledge and experience with major manufacturers and vendors.



For more technical information and detailed presentation please contact

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مؤسسة كمال الخطيب للميانة و المقاولات  
KAMAL ALKHATEEB FOR MAINTENANCE & CONSTRUCTION EST.

