Automated Control Systems



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What is automated control system?

Automated Control System - is a software/hardware solution that integrates the engineering systems* of the residential/public/industrial facility or components of the industrial line in a single point and provides their centralized management and monitoring.

*(e.g., lighting, water supply, ventilation, etc.)





Private segment

The Automated Management System installed in hotels, business and shopping centers, administrative buildings, hospitals and other public facilities allows managing all life-support systems of the facility:

- Heating, ventilation and air conditioning
- Power supply
- Water supply
- Lighting
- Fire alarm
- Access control
- and so on.

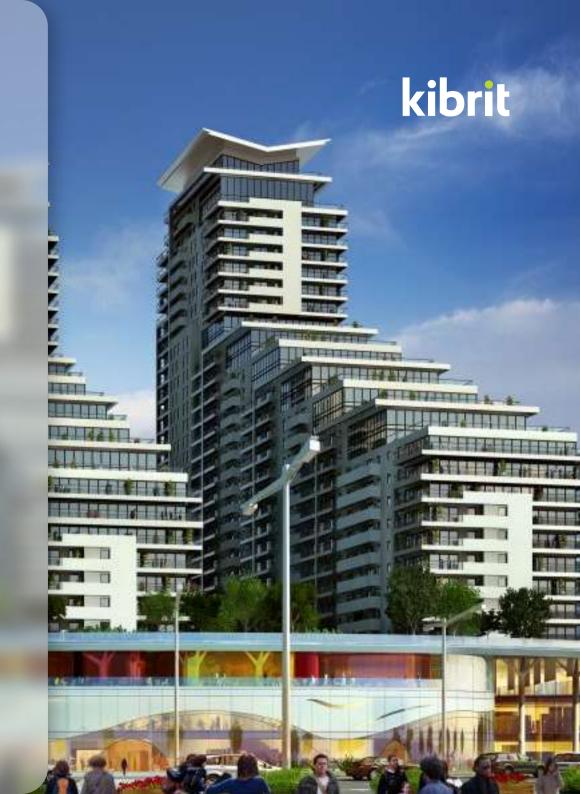
The Automated Management System can be applied in any public facility with an area of more than 500 m²

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Residential segment

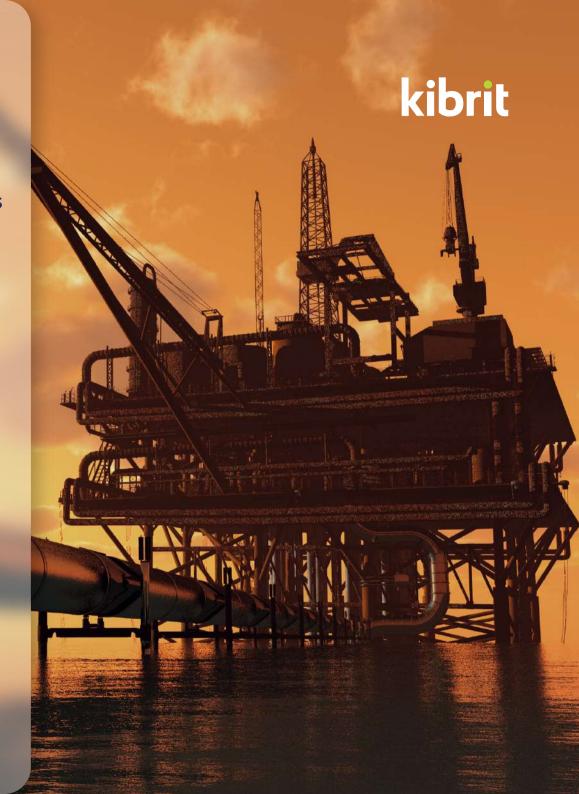
Smart residential complex consists in different systems, the purpose of which is to create convenient tool for controlling the utility costs (Push notifications, meter and utility fees readings) and convenient management environment for managing company (creating and editing resident's accounts, access control, etc.).



Industrial segment

The concept of industrial automation includes many elements, e.g., programmable controllers (PLC), security systems, SCADA systems, drive technology and other related software products.

Main goal of industrial automation is to improve the safety, productivity, efficiency and quality of the processes. Industrial automation is applicable in plants, oil and gas platforms, chemical production, etc.



Smart City

A Smart City – is interrelated system of information and communication technologies with IoT. This system simplifies the management of internal urban processes and makes the lives of the residents more comfortable and safer.

Main goal of a "smart city" is to optimize urban functions and result in economic growth, while simultaneously improving the life quality of the citizens through the use of intelligent technologies and data analysis.



Automated control systems advantages





Maximum safety

Ensuring maximum safety of people and minimizing material damage by means of reducing the "human factor" role in emergency situations.



Cost reduction

"Scenarios" are used and the efficiency of engineering systems is increased, so the costs **are reduced 10% to 30%.**



Operating costs

Increase in the service life of the engineering systems **by up to 50%** thanks to the automation of the operations related to the control of their components.



Convenience and efficiency

Increase in the efficiency of labour of technical staff by up to 60% thanks to the automation of the routine operations.

How does it work?





Primary level

Designing and installation of different controllers, sensors, as well actuation devices and mechanisms.



Automation level

The installation of the controllers that function as a "brain" between the control level and primary level.



Control level

Integration of **SCADA** (Supervisory

Control and Data Acquisition)

software system for centralized control
and monitoring.



What is SCADA?



SCADA systems are designed for monitoring and dispatching control of a great number of remote objects (even at a distance of tens of kilometres from each other) or one geographically distributed object.



Stages of our service



1 Technical assignment

Studying customer requirements and expectations;

 \rightarrow 2 Au

Audit

Inspecting engineering systems in order to identify to what degree they are equipped with required components.

Equipping

Purchasing and installing required components.

 \rightarrow 4

Development & implementation

Implementing and configuring SCADA, developing "scenarios", customizing user interface.

Training

Training personnel to operate the developed BMS.

6

Technical support

Periodical preventive examination, operational problems solving.

What does our customer get?





Automatized management

This is performed by an operator, who sends required commands to engineering systems via software interface (for example, turn on lighting and heating in Zone A).



Monitoring

Status and activities of engineering systems are tracked in real-time mode; the received data is recorded into log-files.



Automatic management

This is performed without the intervention of an operator – basing on scenarios, which are developed in advance (for example, at the end of work day – at 6 PM, turn on lighting and heating in Zone A, B and C).



Analytics

Basing on gathered data, detailed records are formed (for example, a report on electrical power usage by air conditioning system during the last month period).



Maerz (Switzerland)

Matanat-A Azerlime Factory (lime factory in Qazakh, Azerbaijan)

Technical support of BMS for the systems listed below:

- Restoring the functionality of the plant control system.
- Siemens PCS7 troubleshooting
- Modification of the DCS network infrastructure.



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GeoSteel (Rustavi, Georgia)

Geosteel is a leading Manufacturer of Thermo mechanically treated construction steel rebars and plain bars.

Technical support of BMS for the systems listed below:

- Implementing control for new turbine using Siemens Industrial Controllers
- Development of a software solution for printing information tags containing a QR code for finished products
- Development of a project to consolidate various production management systems



kibrit **Our customers** Georgian Energy Solution (Georgia) Automation of water supply system of Mukhrani settlement (Georgia) Technical support of BMS for the systems listed below: • Development of a centralized automated system consisting of eight wells and two main pumps. The total capacity of the system is 351/s.



Baku Crystal Hall

A multipurpose sports and concert arena 30 958 m² in area.

Development, implementation and technical support of BMS for the systems listed below:

- Electrical power supply
- External and internal lighting
- Heating, Ventilation and Air Conditioning (HVAC)
- Fire-alarm
- Access control



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AzInTelecom

The Regional Data Center under the Ministry of Transport,

Communications and High Technologies of the Republic of

Azerbaijan

Technical support of BMS, which is used for monitoring of the systems listed below:

- Climate control
- Smoke, water and gas leakage detection

AZINTELECOM



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Azerbaijan Supermarket "Bravo"

"Storehouse & Hypermarkets" project

Technical support of Building Management System for Storehouse and Hypermarkets:

- Heating, Ventilation and Air Conditioning (HVAC)
- Climate control
- Smoke, water and gas leakage detectione
- Drainage water tank monitoring
- Rooftop unit control system





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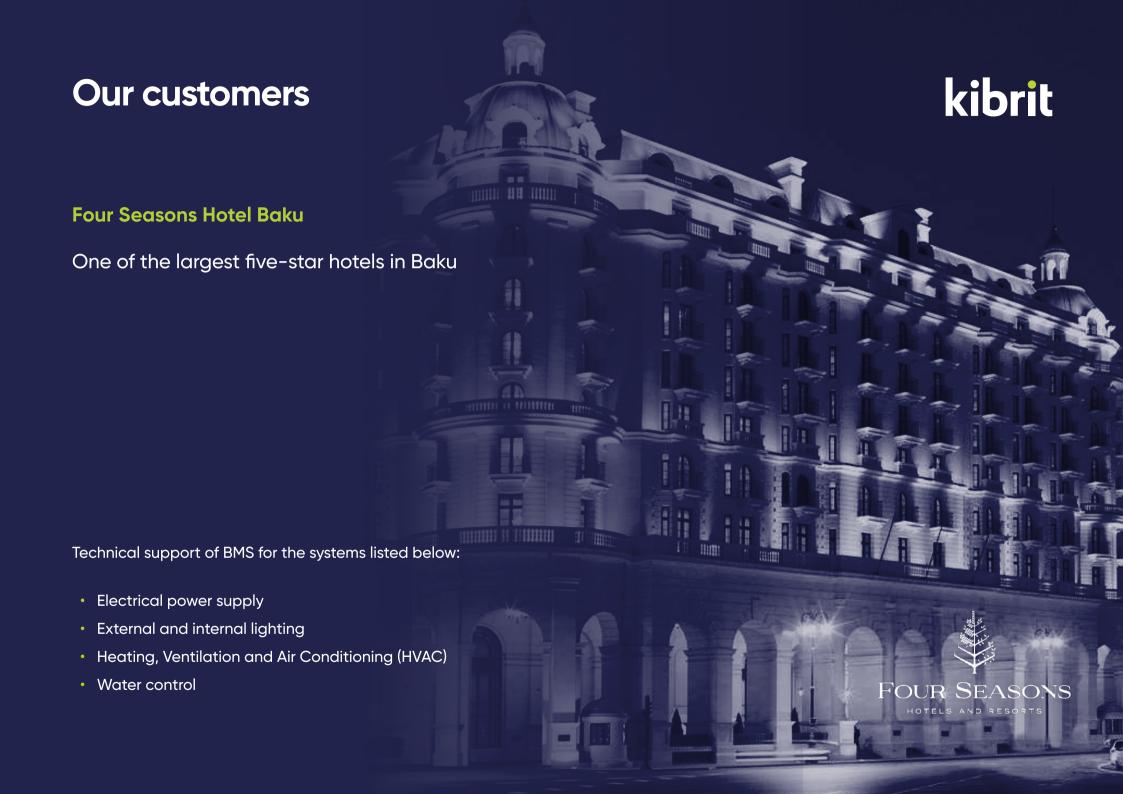
Aquatic Palace

Multifunctional sports complex with a total area of 70 200 m².

Technical support of BMS for the systems listed below:

- Electrical power supply
- External and internal lighting
- Heating, Ventilation and Air Conditioning (HVAC)
- Access control





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Goygol Alcohol Factory

Establishment of control and accounting system for the production of alcoholic products

Our activities within the project:

- Investigation of the existing infrastructure of plants producing alcohol and alcoholic products
- Building a centralized automated system (CAS) model for collecting and analyzing data on manufactured products
- CAS integration with the existing factory infrastructure

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JW Marriott Absheron Baku Hotel

"Technical Support & Technical Procurement" project

Technical support & technical procurement for the systems listed below:

- Heating, Ventilation and Air Conditioning (HVAC)
- Supply of certified Siemens and Sauter products and services



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Khazar TV

"Recovery & Integration of systems" project

Recovery of the systems listed below:

- Recovery of automatic operation of fire suppression system
- Recovery of fire alarm system

Integration of the systems listed below:

- Public annunciation (PA)
- Fire alarm system
- Fire suppression systems



Our Partners

















Partnyorlarımız





SIEMENS





CERTIFICATE OF COMPETENCE

This certifies that

Kibrit Baku / Azerbaidshan

has achieved the qualification program

Components Partner



This certificate is awarded by SAUTER BUILDING CONTROL INTERNATIONAL LTD.

Sautor Di FREIBURG 31,03.2022

Interreption in unadiff
Herre-Dunit-Granate 15
79108 Freiburg L.Br.

M. BISMARK, MARKET MANAGER SEC

First Issued 19.09.2019 - Valid Until 31.12.2022



SIEMENS

Servers Schwerz AG, SUSP S RMASS INT, Theteretexase 1a, 6301 Zog

Letter of Authorization

We hereby confirm that

KIBRIT. TECH 102A Jalil Mammadguluzade, City Point Business Center Baku 1022, Azerbaijan

has been appointed as a Solution Partner of Siemens Schweiz AG, Smart Infrastructure, Building Products, KIBRIT. TECH is granted the non-exclusive sales rights for Contractual Products in the below listed Territory in which KIBRIT. TECH is authorized to market and sell the Contractual Products.

The Territory is Azerbaijan

Contractual Products are the following standard products, systems and services.

Comfort Portfolio

The conclusion of any contract or agreement on behalf of Smart Infrastructure, Building Products (BP) or any action imposing any financial or other obligation on BP requires prior written consent.

This letter of authorization is valid until April 30, 2023.

Zug, April 4, 2022

Yours faithfully,



Güliz Kaletürk Sulejmani Head BA BP International



Philipp Knebel Head BP International

Siemess Schweiz AG Smart lehts enicture GKD at Headquarters Building Products

6300 Zug

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Date: 12.01.2022 To whom it may concer

Authorization letter

Hereby we confirm that «Kibrit-TECH» LLC (Azerbaljan, Baku, AZ1022,102A J.Mammadguluzade, "CID Point" Business Center 10th fl.) is an authorized System Integrator in the territory of Azerbaljan and authorized to provide delivery, installation, startup & commissioning and warranty services for Johnson Controls building automation products, systems and solutions.

This letter is valid until 31.12.2022.

Yours faithfully,

Oleg Vasin Sales Manager BMS, Controls Products Russia&CIS Global Products

Licenses





License for installation and repair of lifting devices, metallurgical equipment, pressure vessels and boilers.

State license for performing the works on the restoration of automated control system of the boiler house and its functioning as a whole.

Certificates











Certificates - Siemens







Certificates - Siemens





Rashad Abdullayev KIBRIT, TECH, Azerbaijan

We herewith confirm that the participant has attended and successfully completed the training course "Comfort Basics, Valves & Actuators"

from 26th October to 29th October 2020.

The training consisted of the following topics:

- HVAC Basic Control and Principles
- Applications J Plant Diagrams
- Product Overview
 - Damper Actuators; DesigoTM; Sensors; Synco; Thermostats; Valve & Actuators; Variable Speed Drives; Energy Meters
- HIT Tool HVAC Integrated Tool
- Design & Engineering
 Different Project stages
 Typical HVAC applications
- DCM Desigo Configuration Module
- - Hydraulic functioning of simple HVAC plants
 - Heat exchanger and air-cooling coil characteristics Hydraulic plant design analysis
 - Valve & Actuators sizing and selection
- Overview about Siemens Tools / Process

 - Siemens Partner Extranat
 SIOS and RGR (Repair Guarantee Request)

Zug Switzerland, 29th October 2020



Markus Macrini Head Comfort Product Management & Technical Support



Manager Comfort

www.siemens.com



Elyar Ismayilov KIBRIT. TECH, Azerbaijan

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 - Valve & Actuators sizing and selection

Zug Switzerland, 29th October 2020

De Daniell

Markus Macrini Head Comfort Product Management & Technical Support

João Diniz Product and Technical Support

Manager Comfort

www.siemens.com



Rashad Abdullayev KIBRIT. TECH, Azerbaijan

We herewith confirm that the participant has attended and successfully completed the training course "Desigo PXC4 and PXC5 — Engineering and Commissioning"

from 17th November to 19th November 2020.

The training covered the following topics:

- . Engineering and Commissioning workflow overview
- TX-I/O configuration and Rail Engineering
- . Modbus configuration with Diagnostics
- · Programming editor and workflows
- . Commissioning and Operation monitoring

The participant is now qualified:

To correctly engineer and commission Desigo PXC4 and PXC5

Zun Switzerland 19th November 2020

Head Comfort Product Management Product and Technical Support & Technical Support

Adrian Fankhauser Manager Comfort.

Jakub Hlubinka Product and Technical Support Manager Comfort

www.siemens.com

Certificates - Siemens Industrial









Certificates - Sauter





CONFIRMATION

Mr. Ruslan PETUNIN

has participated in Training Course

Engineering of modulo 6, Ecos504 Modbus integration, CASE Suite 4.1

which took place between 25th and 29th of October 2021

Subjects:

- Sauter Product Ranges Introduction
- Network Basics (History, MAC, IP-Addresses)
- BACnet Basics and CASE Sun
- Introduction new modulo 6 product range
- CASE Engine: Creating a new project, handling the program and Firmware modules for modulo 6
- CASE Vision; Creating Dynamic Pictures for moduWeb Vision moduWeb Unity and SVC
- Modbus integration using ecos504 with Modbus interface
- Workshop: Practical examples

Freiburg, 29th of October 2021

(Murat Tasoi) Instructor Sauter Building Control International Centrel Hans-Bunte-Straße 15 79108 Freiburg





CONFIRMATION

Mr. Rasul KICHIBAYOV

has participated in Training Course

Engineering of modulo 6, Ecos504 Modbus integration, CASE Suite 4.1

which took place between 25th and 29th of October 2021

Subjects:

- Sauter Product Ranges Introduction
- Network Basics (History, MAC, IP-Addresses)
- BACnet Basics and CASE Sun
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- CASE Vision: Creating Dynamic Pictures for moduWeb Vision moduWeb Unity and SVC
- Modbus integration using ecos504 with Modbus interface
- Workshop: Practical examples

Freiburg, 29th of October 2021

(Murat Tasoi) Instructor Sauter Building Control findernations (Ambril Hans-Bunte-Straße 15 79108 Freiburg





CONFIRMATION

Mr. Elyar ISMAYILOV

has participated in Training Course

Engineering of modulo 6, Ecos504 Modbus integration, CASE Suite 4.1

which took place between 25th and 29th of October 2021

Subjects:

- Sauter Product Ranges Introduction
- Network Basics (History, MAC, IP-Addresses)
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- CASE Engine: Creating a new project, handling the program and Firmware modules for modulo 6
- CASE Vision: Creating Dynamic Pictures for moduWeb Vision moduWeb Unity and SVC
- Modbus integration using ecos504 with Modbus interface
- Workshop: Practical examples

Freiburg, 29th of October 2021

(Murat Tasqi) Instructor Sauter Building Control International Centrel Hans-Bunte-Straße 15 79108 Freiburg



Certificates - Johnson Controls







References





Baku Crystal Hall



The Seaside

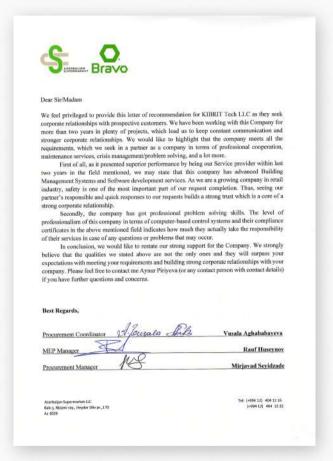
Boulevard Department

References





AzInTelecom



Azerbaijan Supermarket

Thank you for attention!

Contact us

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"City Point" Business Center

Baku, Azerbaijan

