





ABOUT US

OVERVIEW

Albtronics is a specialist integration company focused in building automation technology. Our skills are centered on smart solutions based on KNX, custom software development and specialist control systems that are used in today's buildings and facilities (BMS/SCADA).

OUR CLIENTELE

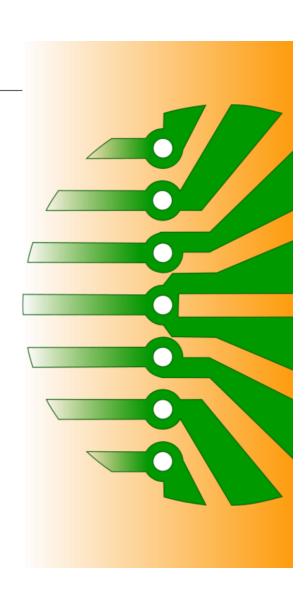
The end user of our technology are home owners, infrastructure developers, recreational centers, hotel operators, commercial and government building operators. These end users are using the latest technology to achieve their particular goal such as energy efficiency, comfortable environment and building assets management in a smart and integrated way.

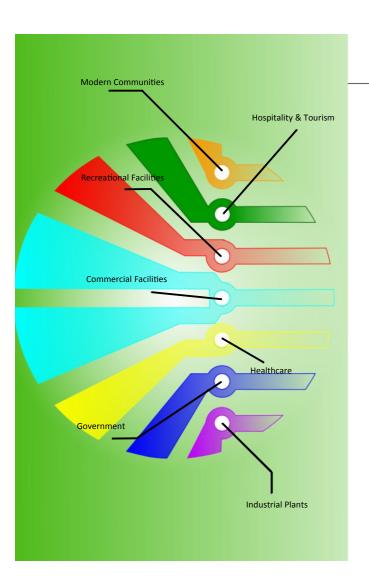
OUR VISION

Albtronics vision is to continue improving and building partnerships at all levels with our customers, partners and third-party application providers that gives us the ability to offer a comprehensive solution in any organizational environment, with the firm objective of achieving the best possible user experience.

OUR VALUES

- · Understand and satisfy our customers.
- · Respect and protect the health and safety of all.
- · Respect and protect the environment. · Value honesty and professionalism in all people
- · Value our employees.



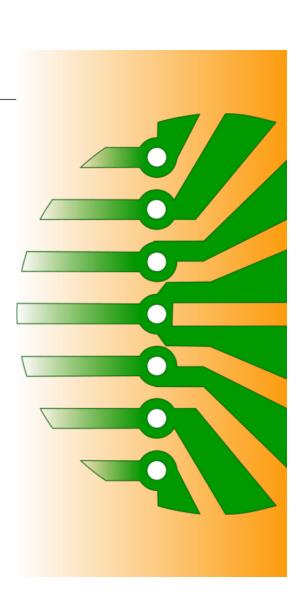




Many markets, many technologies; the base technologies used in each vertical market is similar however each vertical market has its own particular adaptation. Albtronics understands the difference, we understand the differences and our technologist listen to our clients' goals and priorities and build solutions and systems accordingly.

Our specialist market verticals

- Modern communities
- Hospitality and Tourism
- Recreational Facilities
- Commercial Facilities
- Healthcare
- Government







MODERN COMUNITIES

Communities that are built today with the foresight of the type of resident that will occupy these communities over the coming 25 years, will ultimately shape themselves around the lifestyles of those residences taking into account their simple requirements and living philosophies.

Albtronics is the first integrator to adopt technologies that are incorporated in a Smart Community solution, which provides the following features to its residents:

• Energy Management :

Insure you are meeting your energy targets

• Home Management :

Control of Lights, Curtains/Shutters, HVAC & Geo-location Fencing

• Entertainment :

Play video and music throughout the home

Security :

Access control and surveillance

• Communication by Voice & Video :

Intercom Systems

Safety and home protection :

Fire detection, water leakage control and notification

• Community Management :

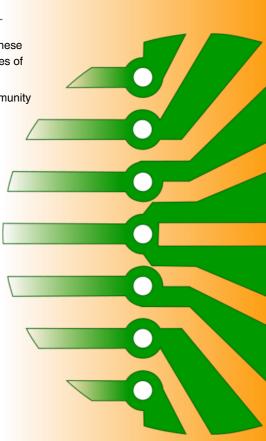
Managed parking and security.

Well Being :

Air quality detection and purification.

• Outdoor facilities management :

Irrigation systems and pool management.







HOSPITALITY & TOURISM

Hotels and resorts all form part of the hospitality and tourism offering, for which we use our design and implementation services to provide the best guests experience

Albtronics has provided system integration to:

• Hotel Management Systems :

Manage rooms/areas access control for clients or administrators.

Clients can control all elements in room through their smartphone app

Hotel Hospitality Audio and video systems :

Interactive TV Systems, Ambience Music, In room sound systems.

• Digital Signage :

Displays menus, day's events, promotions or advertisements

• Surveillance :

Real-time view and storage of video and audio for security/investigations.

• Safety and protection :

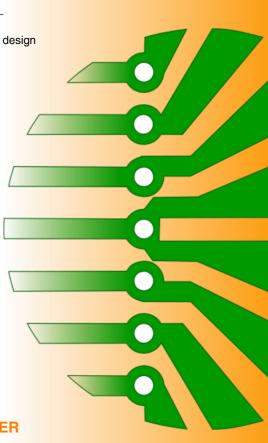
Fire detection, Public address and Evacuation system,

• Converged Networks & Telephony :

Communication and Control

• Conferencing Integration:

Video and audio systems dedicated to conferencing.







RECREATIONAL FACILITIES

Stadiums, museums, libraries, fitness centers, cinemas are some of environments where building automation is tailored to their unique needs. Our experience in designing, installing and maintaining custom automation system is what makes us unique in this market vertical

Albtronics has provided system integration to:

• Climate Control:

Solutions are based on energy-efficient HVAC automation

• Audio/Video Distribution Systems :

One central system to connect TV, streaming services, Load speakers, etc.

• Parking Management Systems:

Make parking easier to use and administer

• Digital Signage :

Displays menus, day's events, promotions or advertisements

• Large format displays :

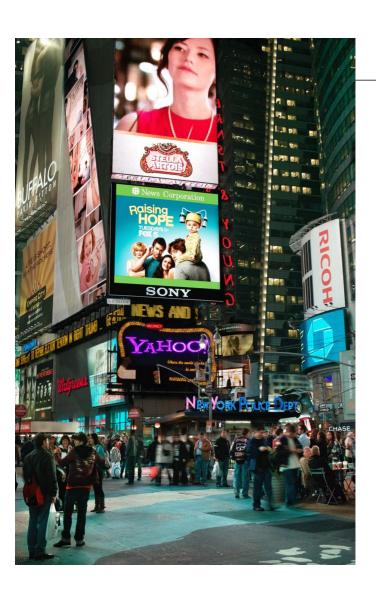
LED screens of many meters in size.

• Security and Surveillance Analytics:

Combining traditional security systems with surveillance analytics in event of mishaps or entrances access control.

• Command and Control Centers

Scada/BMS to visualize and control all elements in real-time





COMMERCIAL FACILITIES

Commercial spaces like shopping malls, sport arenas, places of worship, airports and much more are not just steel and bricks but are complex environments with a variety of power, networking, HVAC systems, security and other subsystems, all of which need to be managed for comfortable, safe and efficient surrounding.

Albtronics has provided system integration to:

• BMS/SCADA:

Control and Automate building functions with real-time data overview and dashboards, helping building operator further optimize performance and energy efficiency.

HVAC Systems :

Reduction in HVAC energy use by achieving up to 45-50% overall energy.

• Parking Management Systems:

Make parking easier to use and administer

• Digital Signage :

Displays menus, day's events, promotions or advertisements

• Large format displays :

LED screens of many meters in size.

Security and Surveillance Analytics:

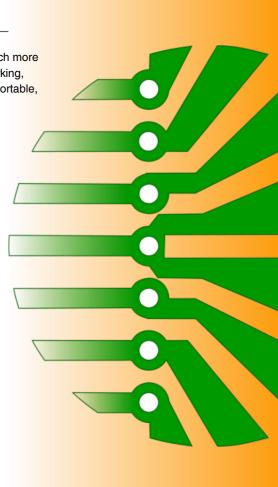
Combining traditional security systems with surveillance analytics in event of mishaps or entrances access control.

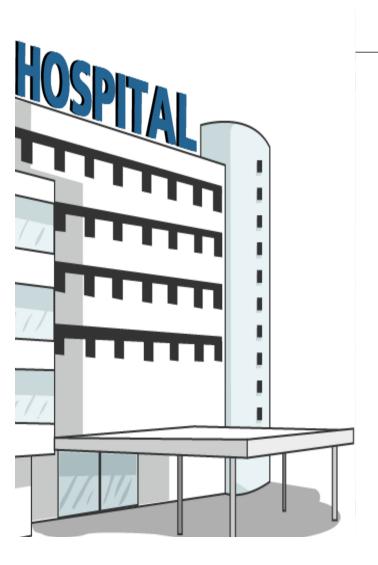
• Renewable Energy Systems

Real-time automatic management and measurement of renewable vs grid

• Safety and Building Protection

Fire detection, power outage automatic recovery, water leakage control and notification







HEALTHCARE

Healthcare is one of the key industries where automation helps improve patient outcomes by supporting technological advancements, making processes more efficient and effective. Notable benefits are real-time nursing of patients and alerts, easier scheduling, handling emergencies, capability to predict changes, responds to changing conditions and deliver regulatory reports.

Albtronics has provided system integration to:

• BMS/SCADA:

Control and Automate building functions with real-time data overview and dashboards, helping building operator further optimize performance and energy efficiency

HVAC Systems :

Reduction in HVAC energy use by achieving up to 45-50% overall energy using smart management of temperature, air supply system, chillers and ventilation systems

Air Filtration Management Systems:

Management of Air filtration system important for lowering the chances of viruses, bacteria

• Scheduling Management Systems :

Physician and patient scheduling to allow better coordination of schedules, effort, time and points of care

• Nursing Call Systems :

Real-time alert and notification between patients and healthcare workers

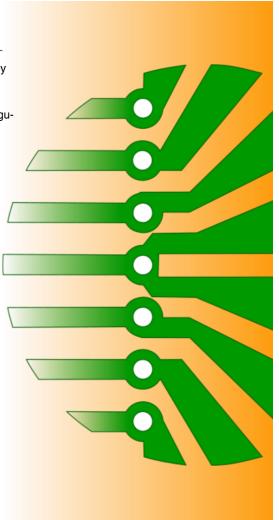
• Security and Surveillance Analytics:

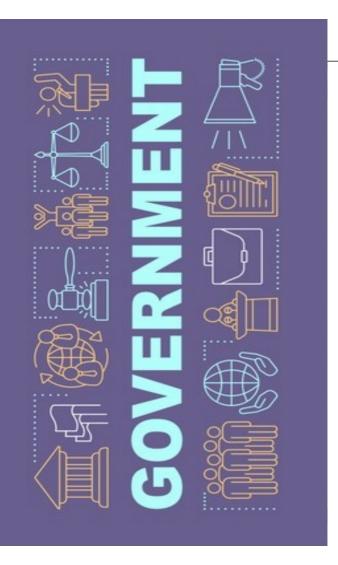
Combining traditional security systems with surveillance analytics in event of mishaps or entrances access control

• Safety and Building Protection

Fire detection, power outage automatic recovery, water leakage control and notification









GOVERNMENT

As government go about their business activities, such as training, researching, promoting initiatives, keeping up with compliance, procurements, idea development and participating in worldwide activities, Albtronics has help in some various integration such as:

• Video Conferencing Integration:

Travel-less communication and collaboration

• HVAC Systems :

Reduction in HVAC energy use by achieving up to 45-50% overall energy using smart management of temperature, chillers and ventilation systems

Boardroom Systems:

Management of impressive presentation systems

Auditorium Audio and Video Systems:

Management of Auditorium Surrounding Systems for addressing the masses

• Converged Networks & Telephony :

Communication and Control

Security and Surveillance Analytics:

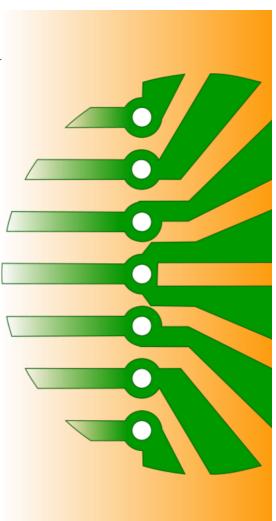
Combining traditional security systems with surveillance analytics in event of mishaps or entrances access control

• Safety and Building Protection

Fire detection and power outage automatic recovery

• Datacenter Management:

Resource management and of all devices in datacenter





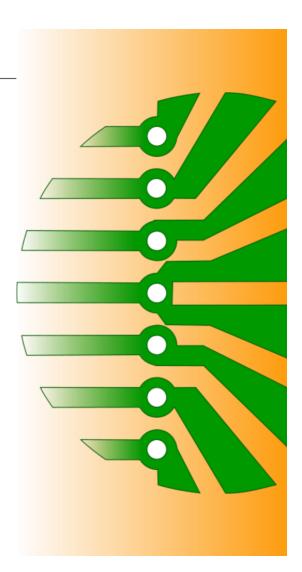


OTHER SPECIALIZED VERTCALS

Today, Albtronics in emerging as one of the best contenders in Albania offering turnkey solutions to the following sections :

- Oil & Gas
- Power and Water Utilities (including Renewable Energy)
- Telephone Operators (TELCO) :
- Transportation
- TV & Broadcasters
- Education
- Corporations

One example of our services has being in Education with the implementation of Mechatronics laboratories for 4 technical high schools in Albania providing a value-added benefit to the future generation of technicians and engineers.







WHAT WE DO?

This chart describes the value proposition that Albtronics brings to the table, each of the four areas are crucial to a complete solutions from design to the post sales support.

DESIG

Albtronics's team of designers, engineers and draftsmen drive the initial phase of creating a solution that answers the performance and specification of a project. Our teams build their designs based on site surveys, user interviews and performance specification documents.

MANAGE

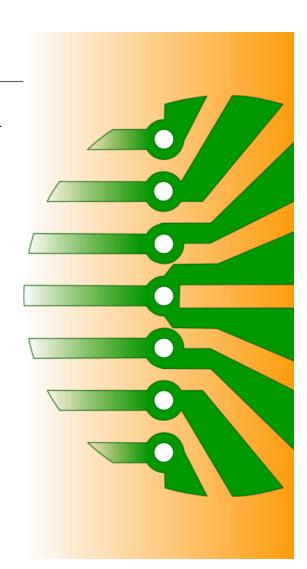
Upon awarding of a project, Albtronics' team take over the implementation of design to make it to work. This involves the project planning, approvals, detail design and tracking of changes. Our experienced team of project managers, coordinators and supervisors work in harmony with our technicians, logistics crew and subcontractors to deliver on time each phase of the project until completion.

PROGRAM & CONFIGURE

Experienced software programmers and technicians work together to build out custom software, configure control interfaces, build out racks, terminate and label cables and much more Senior engineers and technicians create necessary documentation and training material before project's handover.

Support & Maintenance

A signed off project completion certificate marks the start of support service period. Onsite maintenance support is a service that Albtronics extends during the warranty phase and after warranty as an annual maintenance contract. Our technicians and engineers comply with the SLA to support our installations.







For the community at large, Albtronics specializes in the specific automation requirements of private homes, towers and in the application of automation techniques for the comfort and security of our client. Customized touches based on client's preferences can be used to create an ambiance by controlling lighting, shutters/blinds, Air Conditioning, setting of entertainment system along with security, fire and water leakage alerts, access control (biometric or through geo fencing) and surveillance of the premises

Albtronics creates a total home network solution that provides a convenient, secure, joyful and affluent lifestyle anywhere and anytime with the integration of various digital home appliances into one application for the

SMART COMMUNITY SOLUTIONS

What can we do for you?

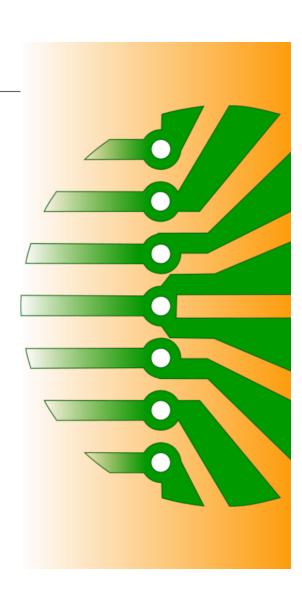
- Control of all premises automation functions from a single system based on KNX standard: reliable, robust and proved in millions of installations.
- Coordinate professionals for climate, lightning, shutters/blinds, sunshades, air quality, multimedia, access control and communication with them, including video intercom or CCTV.
- Safeguard your premises and notify in real-time in case of any risk, such as fire, flood, smoke, gas or intrusion.
- Use your own smartphone or tablet as a remote controller inside and outside your premise.

How is it aesthetically?

- Smart, without switches or other additional remote controllers in walls. A single device with all the controls.
- Touch panels and switches with capacitive technology customized based on client's preferences.
- Compatible with standard electrical accessories such as sockets, push buttons, switches, USB chargers and data outlets.

Why is it reliable?

- We design, together with architects, engineers and/or final owner the control system for the project, integrating all the necessary elements according to their needs.
- We help the installer in charge of the project execution.
- · We certify the right installation of the system.
- · We keep the documentation of the project for the owner.
- We are responsible for guarantees, future enlargements and maintenances, exempting the developer once the installation is certified.







Local and remote control of the residential building.

- ⇒ Local control through capacitive touch panels and customizable switches with ambient luminosity and proximity sensors, all multifunction devices.
- ⇒ User can create scenes, macros, timers and schedulers.
- \Rightarrow Motion and presence detection for function activation.
- ⇒ Interaction with the residential building from outdoors through certified apps for mobile devices, including alarms

Lightning.

- ⇒ Lightning control: incandescent lamps, fluorescent tubes, halogen lamps, LED, RGBW, DALI, DMX, ON/OFF, dimming and scenes.
- \Rightarrow Indoor lighting management according to natural light input.
- \Rightarrow Outdoor lighting control in gardens, swimming pools and other common or private areas.

Blinds/Shutters and solar protection.

- ⇒ Motorized enclosures control: shutters, sunshades, venetian blind, blinds with slats, doors, windows and garages with up/down, positioning and scenes.
- $\Rightarrow \ \ \text{Advanced management of facades in terms of security, cleaning and lowering the energy consumption}.$

Climate and air quality.

- ⇒ Integral climate control: radiators, radiant floor or ceiling for heating and/or cooling, air to water heat pumps, chillers, geothermal systems, solar water heating and water heating tank.
- $\Rightarrow\;$ Forced or automatic ventilation control based different sensors.
- \Rightarrow Measurement of air quality control

Multimedia and Entertainment.

- \Rightarrow Audio/Video systems integration with KNX and other audio/video protocols.
- \Rightarrow Home Theaters for homes and villas.
- \Rightarrow Control of motorized TV/Projector mounts.

AUTOMATION SOLUTION FOR RESIDENTIALS BUILDINGS

Energy Management.

- \Rightarrow Integration of smart electrical appliances and renewable energy systems.
- ⇒ Power disconnection of electrical appliances, watering system and sockets near rest areas to reduce electromagnetic noise.
- ⇒ Energy consumption measurement and management: electric, water, gas and others, to activate-deactivate circuits according to user policies or regulations.
- \Rightarrow Residential building management (BMS) with nearly zero consumption.

Video intercom and CCTV.

- ⇒ Integration of video intercom systems, CCTV and building automation in the same touch panel, for single residential buildings or for any type of residential building.
- \Rightarrow Remote door opening with electric strike and access control in private and public areas.

Security.

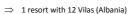
- $\Rightarrow\;\;$ Integration with intrusion alarm, connected with the alarm monitoring company.
- $\Rightarrow \ \ \mathsf{Panic} \ \mathsf{room} \ \mathsf{control}.$
- $\Rightarrow\;$ Simulation of presence to prevent intruders when client's outside of premises.

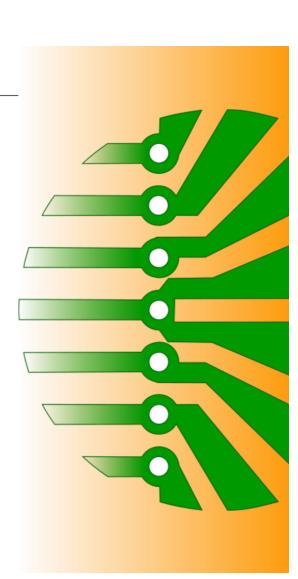
Technical Alarms.

⇒ Technical alarms detection: smoke, fire, gas, flood, air quality and intrusion. Automatic outage and warning to the end users.

ACCOMPLISHED PROJECTS

- ⇒ 56 Apartments with customized automation (Albania).
- ⇒ 6 Duplex Apartments (Albania)
- \Rightarrow 12 Penthouses (Albania and Kosovo)
- \Rightarrow 36 Vilas (Albania and Kosovo)









Lightning

- ⇒ All type of lamps, including dimming and RBG color selection to recreate the room with scenes, as well as DALI system management.
- \Rightarrow Special electronics for capacitive loads to achieve a longer life for the system.
- \Rightarrow General OFF with a single press of the guest for their convenience (MASTERLIGHT FUNCTIONS).
- ⇒ Light guide towards the bathroom at night thanks to presence detection in strategic positions, too avoid blinding or disturbing other guests in the same room.
- ⇒ Integration of decorative outdoor lightning, such as the one in façade and terrace, in a single control.
- \Rightarrow Welcome scenes in the room to the hotel experience manager's choice.
- ⇒ Management of special sockets: fridge, coffee machine, 24h laptop chargers with current limitation, etc.

Blinds/Shutters and solar protection

- \Rightarrow Shutters, blackouts, venetian blinds, roller blinds and curtains.
- $\Rightarrow \;\;$ Solar protection for the indoor furniture.
- ⇒ Positioning according to the energy management.

Climate and air quality

- \Rightarrow Any heating or air conditioning system, including fan coils, splits, variable refrigerant volume, chilled beam.
- ⇒ Setting a different set point temperature and fan speed according to the guest presence: comfort, standby, economy and protection. Introduction of Hidden Set points for rooms to better manage the energy.
- ⇒ Automatic turn off of climate system when a window/door is opened with a warning to BMS/GRMS.
- ⇒ Humidity control in places with high humidity or dew risk to void bad smells, damage of furniture and excessive energy consumption.
- \Rightarrow Air quality management and forced ventilation.

Presence Detection

- ⇒ Advanced algorithm for presence detection of guest to establish automatic climate management policies, dynamically adjustable according to hotel specific needs. Selective cancelation of this for VIP.
- $\Rightarrow \ \ \text{Information available for hotel staff with growing opportunity for housekeeping.}$

AUTOMATION SOLUTION FOR HOTELS BUILDINGS

Common Areas

- ⇒ In addition to rooms, the integration is also for public areas such as restaurants, reception, meeting rooms, spa, gym, swimming pool and outdoor terraces.
- ⇒ Lightning control with presence detection in all kind of corridors, hallways, waiting rooms, etc.

Energy Management

- ⇒ Room energy consumption measurement of electric and climate system consumption.
- ⇒ Water/Gas consumption measurement, warning maintenance service when there is consumption without guest in the room.
- ⇒ Positioning the enclosures to avoid solar radiation and reduce energy consumption

Audio System Integration

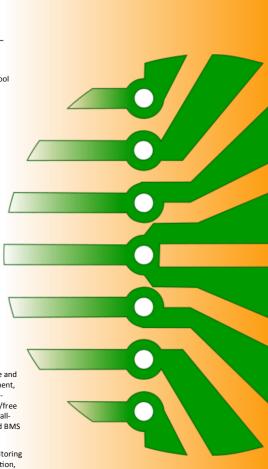
- ⇒ Guest can enjoy their own audio contents (YouTube, Spotify, etc) by pairing their smartphone with the surrounding system through Bluetooth. Two channels with independent settings or auxiliary TV output in both the bedroom and bathroom.
- \Rightarrow Loudspeakers are connected to automation system and their volume can be restricted through BMS/GRMS

Advanced controls

- ⇒ Guest can control all the elements in room through their smartphones or tables with app.
- $\Rightarrow \ \ \text{Customize capacitive touch panels with Hotel Brand logo to control most of the room functions}.$
- \Rightarrow The hotel staff and managers can take any type of control through BMS/GRMS based on their roles and functions.

ACCOMPLISHED PROJECTS

- ⇒ Radisson Collection Morina Hotel, Tirana (49 Rooms) includes full electrical installation, customized hotel room door signs and capacitive touches, monitoring of all room statuses, energy saver with lightning control, real-time monitoring of emergencies, fire and evacuation system monitoring and control, VOIP system for room and reception, Wi-Fi and CCTV, hospitality TV system management, Control and monitoring of Conference Room with Audio system, video projection, Conference real-time video and ventilation, Advanced Hospitality Automatic Air Conditioning command and control using presence, window contacts and sold/unsold/reserved/free statuses for each room, monitoring and control of lighting and air condition of common-areas such as Restaurant, Bar, Kitchen, Hallways, Garden and Parking, Pool Light management, mechanical system monitoring and control, Radisson complaint scenarios and BMS for whole hotel with automatic or customized reports.
- ⇒ Hotel Iliria, Tirana (14 Rooms) includes full electrical installation, customized room access control and capacitive touches, monitoring of room statuses such as Busy/Free/Reserved/DND/MUR, Audio control through Internet, TV or guest cellphone, Fire and Evacuation, VOIP system, WiFl and CCTV view for common areas, Automatic Air Conditioning, scenarios and BMS and GRMS with automatic or customized reports.
- ⇒ AND MUCH MORE ...







RETAIL ENVIRONMENTS:

- ⇒ Integral lightning management: Constant lightning regulation according to external light input. Integrated all kind of lamps and field buses like DALI and DALI.
- ⇒ Climate Management: Machine Rooms, Air Treatment units, Variable Air Volume (VAV) ventilation systems, Variable Refrigerant Volume (VRV) systems, Chillers, Fan Coils, Splits and cassettes, Forced Ventilation, Humidity and Air Quality Control.
- ⇒ **Doors, Windows and Blinds control**: Doors, windows, shutters, sunshades in integration with Security and Climate management system.
- \Rightarrow **Presence:** Activation of functions according to presence detection and crowd density.
- ⇒ Access Control: Access control system integrated in KNX or any other protocols based on the project requirements.
- ⇒ Measuring and managing consumption: Energy, cold and hot water and gas. Integration with renewable energy systems, if available.
- ⇒ BMS (Building Management System) /SCADA: Local for maintenance and control management of the building. Remote access for centralized maintenance and control of several buildings.

FRANCHISES

- $\Rightarrow \ \ \text{Franchises of restaurant, fashion, design, building materials, etc.}$
- $\Rightarrow \ \ {\it Climate Control, air quality, lightning, security, enclosures, etc.}$
- \Rightarrow Customization of touch switches with the franchise branding.
- $\Rightarrow\;$ Control of installations through tablets, computers or smartphones.
- \Rightarrow Scenes can be defined and reconfigured by franchise directors according to customer's experience.
- ⇒ Schedulers for activations, temperature set points and scenes.
- \Rightarrow Energy consumption management.
- \Rightarrow System monitoring and updating, both locally and remotely.
- \Rightarrow Full management through franchise property networks or though Cloud-based solutions.
- \Rightarrow Reception and handling of customers' feedback with satisfaction surveys about services and quality in franchises.
- ⇒ Access control system
- ⇒ BMS (Building Management System) /SCADA: Local for maintenance and control management of the building. Remote access for centralized maintenance and control of several buildings.

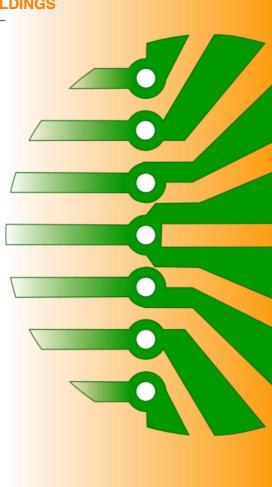
AUTOMATION SOLUTION FOR COMMERCIAL/GOVERNMENT BUILDINGS

Branch offices network:

- \Rightarrow Banks, transport companies, rental companies, etc.
- \Rightarrow Climate Control, air quality, lightning, security, enclosures, etc.
- ⇒ Customization of touch switches with the company branding.
- $\Rightarrow \ \ \mbox{Control of installations through tablets, computers or smartphones}.$
- \Rightarrow Schedulers for activations, temperature set points and scenes.
- ⇒ Energy consumption management.
- $\Rightarrow\;$ System monitoring and updating, both locally and remotely.
- ⇒ Reception and handling of customers' feedback with satisfaction surveys about services and quality in franchises.
- ⇒ General Access control system for all branches
- ⇒ BMS (Building Management System)/SCADA: Local for maintenance and control management of the building. Remote access for centralized maintenance and control of several buildings.

ACCOMPLISHED PROJECTS

- ⇒ Albanian Ministry of Energy and Infrastructure: Automation includes BMS, automation of Lightning, HVAC, Ventilation, Energy Management, Data Room and scenarios.
- ⇒ Albanian General Prosecutors Institution: Automation includes BMS, Access Control, Fire and Evacuation System, HVAC, Ventilation and Scenarios
- ⇒ 1 Museum: Automation including lightning and scenarios (Albania).
- ⇒ 1 National Library: Automation including weather system, shutter management and HVAC control (Albania)
- ⇒ Kosovo Parliament Data Center: Automation include BMS, Access Control, CCTV, PDU, Air Conditioning, Rack management and environmental sensors and alerts.
- Mechatronics Laboratories in 4 technical high schools: Automation include Educational training equipment, robotic devices, PLCs, Educational embedded programming boards, interactive boards and training material for instructors (Albania)
- ⇒ Credins and BKT banks with branch offices in Albania and Kosovo: Automation includes BMS, Access Control, CCTV and Fire and evacuation systems.
- ⇒ 2 Gyms: Automation include: BMS, Lightning management, Ventilation and HVAC Control, CCTV, Multimedia system, customized touch panels and Fire and Evacuation system.
- ⇒ 5 Restaurants: Automation includes: Lightning (RGBW and dimming), Customized Touch panels, Multimedia control, HVAC and Ventilation, customized scenarios and local and remote connection.
- ⇒ AND MUCH MORE ...







Albtronics' in-house built BMS/Scada system provides a centralized technical management of a building by reducing energy consumption and providing critical information for based decision-making to the property. BMS/Scada is a critical element in achieving some key targets, such as total control, energy saving, preventive maintenance and return on investment in the short term.

Albtronics' BMS/Scada system can be integrated with other control systems and building management protocols to provide a complete automation, control and supervision solutions of the building in a centralized way.

Building Management System (BMS) / SCADA

BMS/SCADA Details:

- ⇒ Window/Linux operating system.
- ⇒ HTML 5 web interface/s with different roles and access rights.
- ⇒ Default Implemented Fieldbuses: KNX, Modbus, SNMP, OPC UA/DA, LonWorks.
- ⇒ Custom Fieldbuses and Protocols: M-Bus, BACNet, HikVision, Hune, Zennio Access, GPRS module for SMS/Email notification, API JSON/XML, CANBus, Vivanet.
- ⇒ Default API for integration with other systems.
- ⇒ Module for Export data to MySQL, Microsoft SQL Server, OLE DB, Oracle and PostGreSQL.
- ⇒ Multi-language views, extensive reporting, custom graphics and schemes.
- ⇒ Alert Module based on roles for each operator.
- ⇒ System open to changes for integration of other open/proprietary protocols.
- ⇒ Cloud-based solution for multi-branch monitoring or Active Directory Auth.
- $\Rightarrow\,$ Basic maximum limit tags up to 65000.

