



# COMPLETE SOLUTION FOR INDUSTRY

ON THE WAY TO "INTELLIGENT MANUFACTURING"

- reduce production costs;
- increase the efficiency of equipment operation;
- implement cyber-physical systems and the Internet of Things.



#### **Compass Engineering** sets a course for digital transformation goals using an

integrated approach to building





#### PROFESSIONAL SERVICES

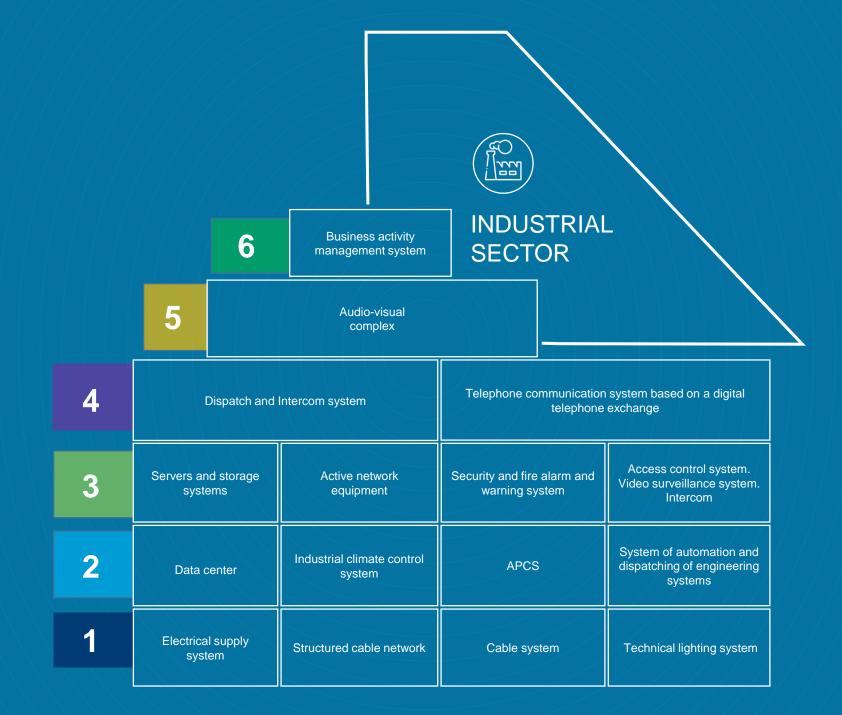


**MODERN IT SYSTEMS** 



INTEGRATION WITH INDUSTRY **BUSINESS APPLICATIONS** 





## ELECTRICAL SUPPLY SYSTEM

Ensures the uninterrupted operation of technological and business processes, reduces the company's energy dependence on the external power grid and increases the overall resilience of the engineering infrastructure

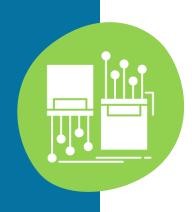




- Ensuring the continuity of technological and business processes, reducing the risk of financial losses.
- Ensuring the reliability and resilience of the engineering infrastructure.
- Compliance with safety standards and requirements.
- Optimization of the structure and cost of the power supply system through the competent division of electricity consumers into groups.
- Guaranteeing the quality of electricity, regardless of the parameters of the external grid.
- Optimization of electricity costs.
- Centralized monitoring of key power supply parameters and equipment status.

## STRUCTURED CABLE NETWORK

Creates a unified enterprise data environment



- Seamless and uninterrupted operation of the company's IT infrastructure
- Flexibility and scalability of the solution with the ability to expand the system and change during its operation



## CABLE MANAGEMENT SYSTEM

Creates an environment for external or internal cable laying for various types of networks (alarm system networks, fire extinguishing system networks, electrical networks, telephone networks, computers, TV networks, etc.)



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- Easy installation of cables and wires and their subsequent maintenance
- Easy extension of cable routes
- Convenient and affordable further modernization and reconfiguration
- Ensuring electromagnetic compatibility
- Corrosion, barrier and fire protection of the cable
- Reliable and convenient maintenance of connections
- Electrical safety

## TECHNICAL LIGHTING SYSTEM

Ensures comfortable activities, normal passage of people, as well as safe traffic



- Timely adjustment of lighting to the architecture, equipment and customer requirements ensures clear and uninterrupted installation work
- Compliance with architectural requirements
- Ensuring light comfort
- High uniformity of lighting
- Optimization of energy costs
- Power redundancy
- Flexible monitoring and control options



#### **DATA CENTERS**

Allows you to centralize the capacity for storing and processing information, increase security, reliability, speed of access to information and its processing

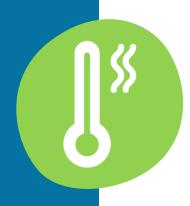


- Increase the efficiency of server, networking and storage equipment
- Mobility when building a container solution
- Savings in operation
- Data protection and regulatory compliance
- Scalable to meet the variable capacity requirements of business applications



## INDUSTRIAL CLIMATE CONTROL SYSTEM

Provides comfortable climatic conditions for staff and equipment



- Ensuring the operation of mobile and fixed-line communications, data centers, and industrial equipment in normal climatic conditions.
- Reducing the cost of system ownership
- Saving usable space
- Use of waste heat in adjacent systems



## AUTOMATED PROCESS CONTROL SYSTEM

Manages all engineering systems within a single center and automates centralized monitoring of deviations



- Continuity of control and independence from the "human factor"
- Prompt prevention of emergencies and their timely detection, reduction of the consequences of accidents
- Increased MTBF
- Efficiency in responding to emergency and pre-emergency conditions of engineering equipment, planning of preventive repairs
- Reducing the number of service personnel
- Energy saving due to optimal management of engineering equipment
- Increased level of comfort and safety

# AUTOMATION AND DISPATCHING SYSTEM FOR ENGINEERING SYSTEMS

Provides effective management of the entire engineering complex of the facility from a single control center





- Reducing operating costs due to energy saving
- Reducing the cost of repair and replacement of engineering equipment
- Coordinated and unified operation of all building subsystems
- Access to manual control of building equipment from mobile devices
- Reliable password system and integration with BMS of access control and barrier management systems, burglar and fire alarms, elevators, escalators, etc.
- Remote temperature change in each room separately
- Early warning of emergencies and automatic recovery of arising defects/accidents
- Improving the energy efficiency of the building
- Identification of sources of inefficient energy use per day, month, year, etc.
- Elimination of misuse of energy resources (monitoring and control of water, heat and electricity supply)
- Reducing the human factor in management
- Prompt response to unforeseen events
- Loyalty of employees and customers due to comfort and use of innovative energy saving technologies

## SERVERS AND DATA STORAGE SYSTEMS

Provides reliable storage of information resources and guaranteed access to them. Storage systems can be both part of and the backbone of a data center

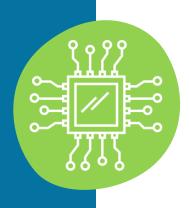




- Reliable operation of all systems and services, including management systems and web resources
- Protection against tampering and data deletion
- Increasing the speed of information processing
- Search for the necessary data in information and disc arrays
- Continuous operation of production, system and technological services in compliance with the required level of service quality.

## ACTIVE NETWORK EQUIPMENT

Forms the basis for organizing the IT infrastructure of the enterprise and ensures efficient and secure information traffic, serves as a medium for signal amplification and conversion



- Internet access (wired and Wi-Fi)
- Access to multimedia services
- Video conferencing
- Support for all connections simultaneously and with the specified quality
- Full control and management of the created network
- Guaranteed signal strength and speed, regardless of the user's location





#### **SECURITY ALARM SYSTEM**

Provides timely notification of the security service about the penetration or attempted penetration into the building, its separate premises or the surrounding area, with fixation of the fact, place and time of violation of the security boundary



- Timely notification of unauthorized persons entering the protected area
- Constant monitoring of the situation in residential, office, industrial premises, external and internal perimeter, regardless of the area of the protected object and time of day
- Ensuring a high class of security in sensitive areas
- Timely warning about the dangers and risks of fire, accidents and emergencies
- Integration with other security systems



## ACCESS CONTROL SYSTEM. INTERCOM

Solves the tasks of controlling and managing visits to individual premises, as well as operational control of personnel movement and time spent on the territory of the facility



- (integration with related systems, including IP communication)• Preventing access of unauthorized persons
  - Ensuring a high class of security in critical premises

Creation of an integrated security complex

- Accounting of employees' working time
- IP intercom system at the entrance groups
- Blocking the repeated passage of a user without his/her prior exit
- Temperature screening at entrances, etc.
- Possibility to generate a hidden alarm in case of forced door opening.

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#### VIDEO SURVEILLANCE SYSTEM

Allows you to receive information about the state of the protected object (technological process) by collecting, processing, archiving, storing, displaying and analyzing this information



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- Remote monitoring in critical areas
- Video evidence protection
- Control over personnel actions
- Video control of service quality
- Integration with related systems (creation of an integrated security complex)
- Application of video analytics (face recognition, car number recognition, visitor accounting, quick investigation of incidents, generation of automatic alarms, etc.)

## COMMUNICATION SYSTEM BASED ON DIGITAL AUTOMATIC TELEPHONE EXCHANGE

Ensures the organization of highquality internal and external communications between employees through a telephone system







- Analysis of data on incoming, outgoing, missed and processed calls or comparing the cost of any call
- Quickly add new subscribers and delete unnecessary ones
- Large internal network with short numbers
- Secure communication without interruptions
- Savings on equipment installation and monthly costs
- Conference calls without loss of signal quality
- Multichannel capability
- Organization of communication for emergencies

## DISPATCH AND INTERCOM SYSTEM

Provides operational dispatching, loudspeaking communication, emergency calls and loud alerts with the central server



- Stable communication in ordinary offices, car parks and restaurants, as well as in the harshest environments (temperature extremes, exposure to aggressive chemicals, dust, moisture and noise)
- Setting up flexible scenarios for interaction with other engineering systems (building automation).



#### **AUDIO-VISUAL COMPLEX**

Provides a visual representation of images, video, audio, as a rule, with the possibility of organizing video conferencing and recording what is happening



- A full range of audio-visual support for events in the conference hall, sound and video information in restaurants, bars, lobbies
- General broadcast of advertisements, music programs, video and audio messages

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Compass Engineering leads to the goals of digital transformation in an optimal way

We create the foundation – the engineering and IT infrastructure, which gives companies the ability to use resources efficiently.



- 10 years of experience
- 50+ certified specialists
- 6 areas of work
- We work in Ukraine, Central Asia and Eastern Europe
- 9 comprehensive industry solutions
  - management system
- ISO 14001:2015, ISO 9001:2015
- project approach



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# Setting the course for digital transformation goals since 2008!

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