

AV&Tist TECHNOPLUS



**Automated integrated systems
for informatization, management, safety and life support
of industrial and social facilities**

**Specialized system solutions
of AVITIST-TECHNOPLUS company**

ABOUT the COMPANY

AVITIST-TECHNOPLUS, LLC is an engineering company that has highly qualified personnel;

is a system integrator in the field of informatization, management, safety and life support of industrial and social facilities.



We carry out

Consulting:

The opportunity assessment, design of management model and systems concept, monitoring and project audits.

Development:

The prototyping and creation of the necessary software solutions in the field of integration and systems management.

Engineering:

The design, installation and maintenance of integrated high-tech systems.

Our solutions are :

- *economical and energy efficient for the owner;*
- *optimal work processes for staff;*
- *comfortable for users.*

The main an indicator of the effectiveness of the solutions of the AVITIST-TECHNOPLUS company is the accumulated implementation experience and successful practice

Multifunctional audiovisual systems
(AVS, the situational centers)

IT infrastructure systems
(server systems, storage systems, network infrastructure, information security systems)

Integrated engineering infrastructure
(Local computing systems, structured cabling system, UPS & batteries for UPS, diesel generator installations, air-conditioning systems)

Integrated security systems
(Access control systems, CCTV, perimeter security systems, navigation systems of parking and paid parking)



Creating cost effective, comfortable and safe living environment

The complex solutions

Industrial automation systems

Automation and dispatching systems for engineering equipment and building systems
(BMS*)

Complex systems of dispatch and technological control of networks, facilities and equipment of the energy sector

Training complexes and training platforms for training dispatch personnel

Industrial automation systems

Systems and automation equipment

Automated process control systems

Automated systems of operational dispatch control

Telemechanics systems

Integrated energy accounting systems

Emergency control systems

Software.
Production control systems

MES* Chesla
(production executive systems)

Maintenance and repair systems

Automated process control systems

The complex solutions

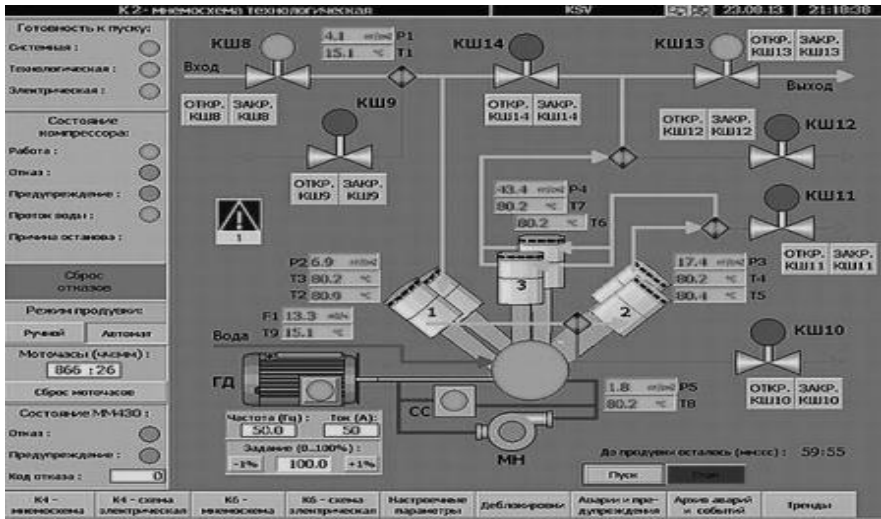
APCS are built using:

Automation hardware from leading global manufacturers
(Schneider Electric, Phoenix Contact, Siemens, OMRON,
Mitsubishi Electric, OBEH, WAGO, MOXA)

SCADA systems

Distributed control systems

Application software

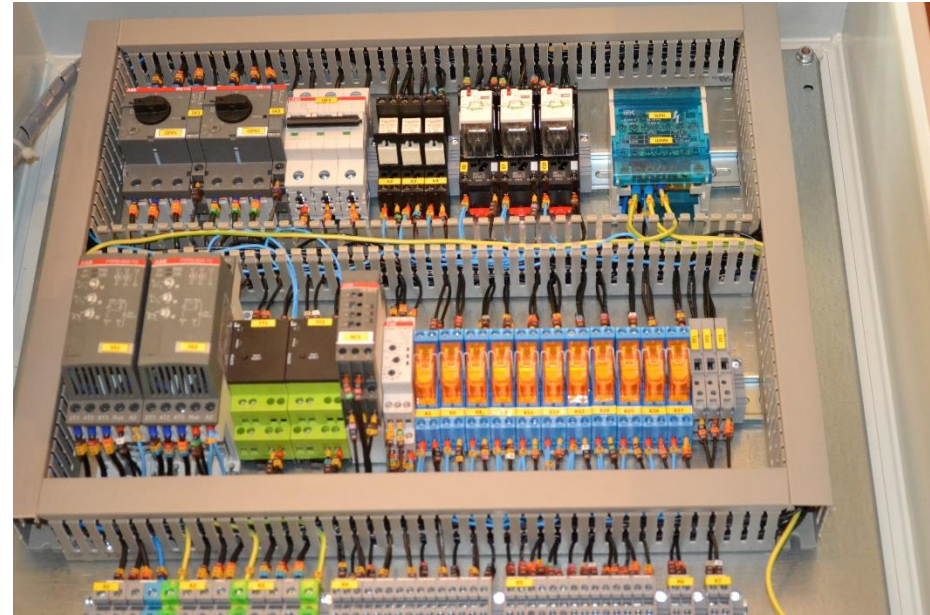


Electric drives



- Cabinets of low-voltage complete devices (LVCD) up to 1000 V;
- medium voltage alternating current electric drive 6/10 kV;
- low voltage alternating current electric drive 220/380/660 V;
- DC electric drive;
- low-voltage soft starters 230/400/440/460/690 V, 8-3500 A;
- high-voltage soft starters 1.5 / 3/6/10/15 kV, including the UPTF series.

Schneider Electric, Siemens, ABB, ChEAZ, ELL, EATON equipment



in 2020-2022

- for the technical solution of Komplitech, LLC for the production accounting of material and energy flows of a typical oil refinery (Russian Federation);
- for the modernization of technological pipelines of the oil products storage warehouse for Belorusneft-Minskobnefteprodukt, RUE in Fanipol, Belarus;
- for the modernization of the automation system for monitoring the components of the filling area for packed raw materials in the premises workshop for Pukhovichi Plant of Bread Products, OJSC *and others*.

AVITIST-TECHNOPLUS solutions for power industry enterprises

Automated dispatch control systems

Maintenance and repair systems for electrical equipment

Unified energy systems analysis platforms

Collective display systems for control rooms

Telemechanics systems

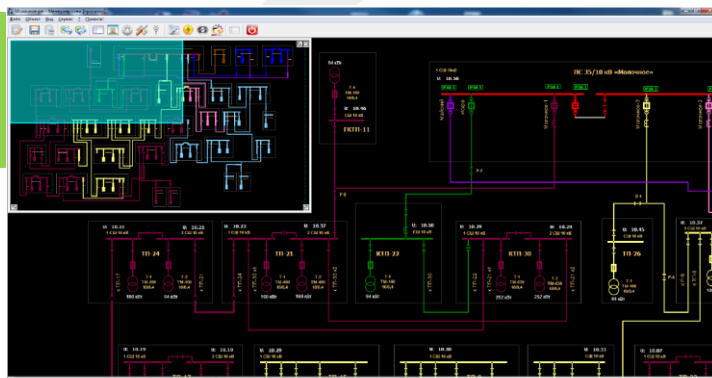
Staff training and knowledge testing software

SOLUTIONS for energy facilities of the fuel and energy complex and industrial enterprises

Automated dispatch control systems



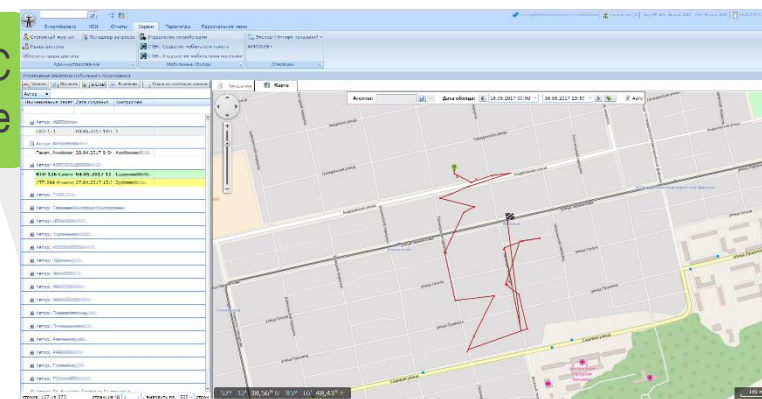
SISTEL-2020



- SCADA
- DMS
- OMS
- GIS



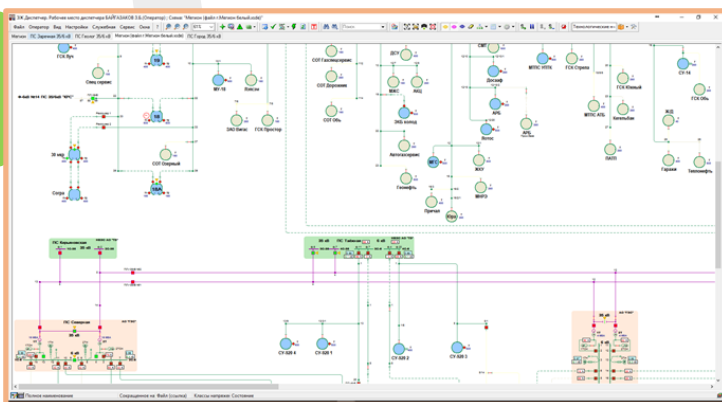
SABPEC software package



- Service and repair system for energy equipment



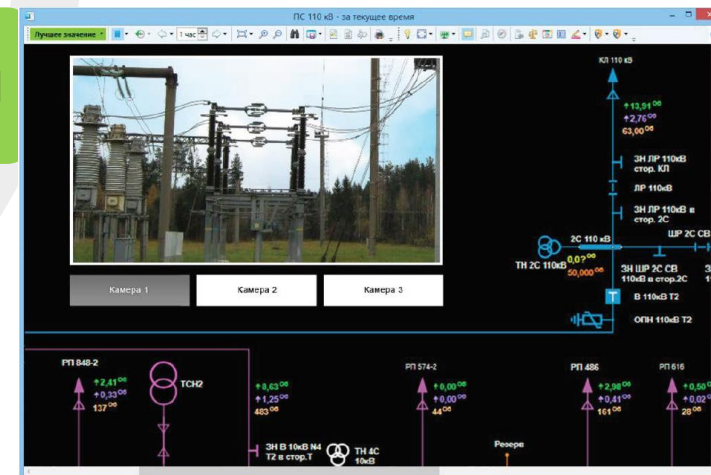
MODUS Dispatch information system



- SCADA
- DMS
- OMS
- GIS
- OTS



СК-11



- SCADA
- EMS
- DMS
- OMS
- OTS
- Network repairs

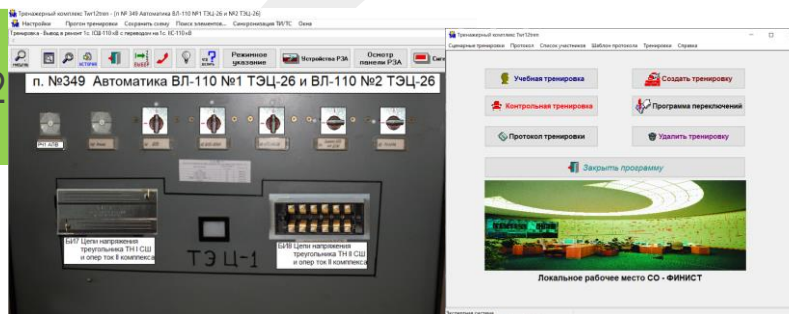
Solutions are built using modern software and hardware RTSoft, IT Sfera, Modus, Sistel and other automation brand

SOLUTIONS for energy facilities of the fuel and energy complex and industrial enterprises

Software systems for training dispatch personnel



TWR-12

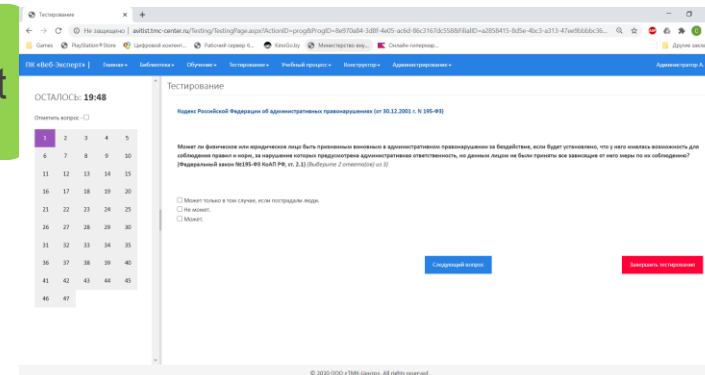


- Operational switching simulator

ТМК-Центр

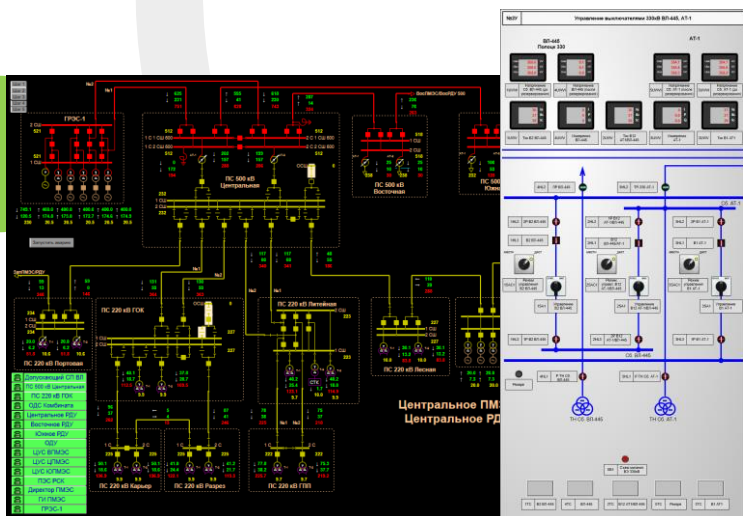
WEB-Expert

- Theoretical (distance) training
- Check of knowledge



MODUS

MODUS

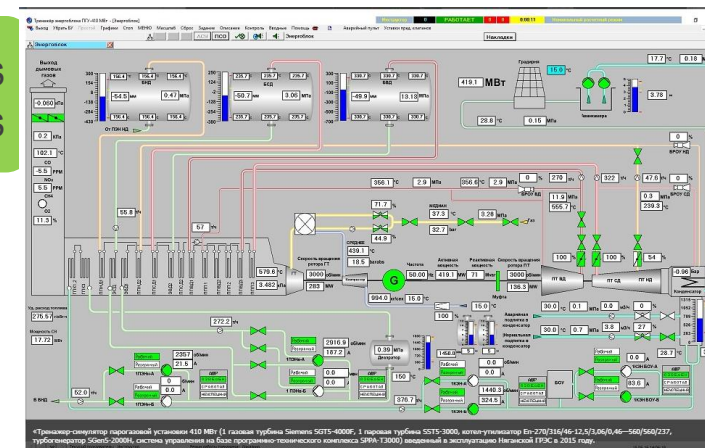


- Operational switching simulator with the possibility of static calculation of the mode



Trainers for power plants

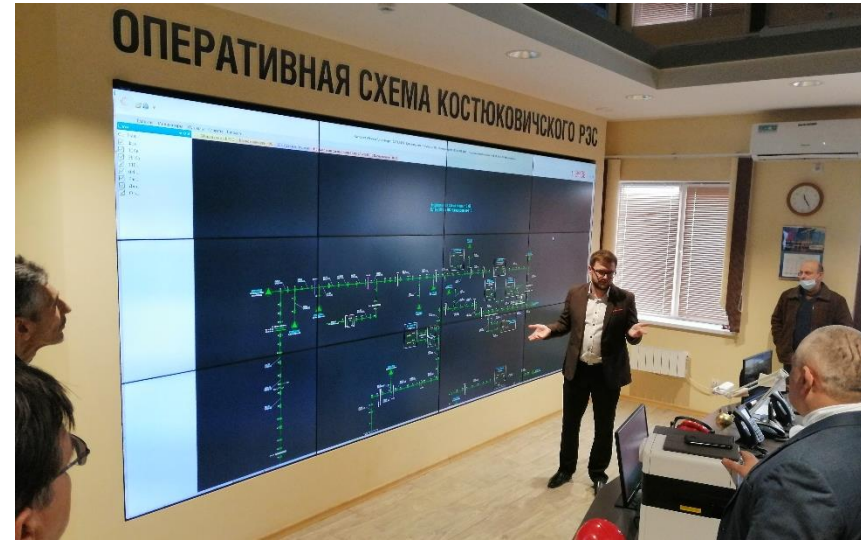
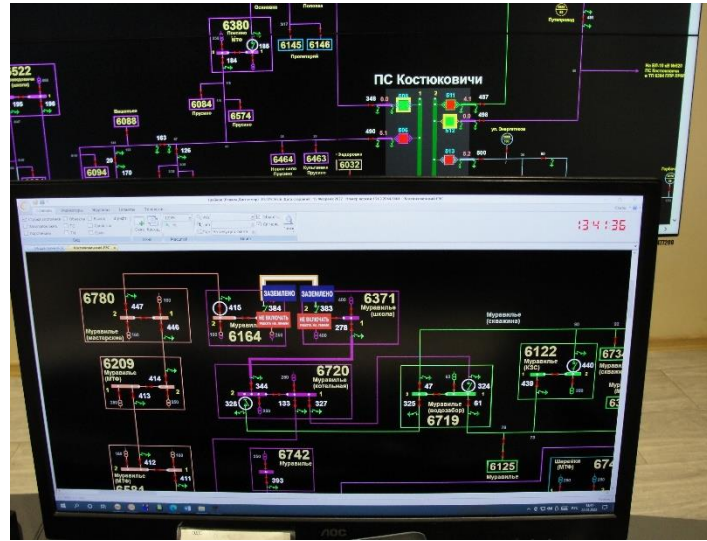
- Cross-linked station simulator
- Unit / Boiler / Turbine Simulator



Solutions are built using modern software and hardware for Energy technologies, Modus, TMK-Center and other automation company

Automated dispatch control systems. Trainers for dispatchers

Customers & Reference Objects



in 2020-2022

- for Belenergo, SPA, Belarus;
- for Mogilevenergo, RUE, Belarus;
- for Minskevenergo, RUE, Belarus.

SOLUTIONS for energy facilities of the fuel and energy complex and industrial enterprises

Electrical substations from 6 kV and higher



Supply of electrical equipment 0.4-110 kV

- Switchboards 0.4 kV.
- Cells 6-110 kV.
- Transformer substations 10 / 0.4 kV.

*Solutions are built using modern software and hardware automation from
Schneider Electric, ABB, Siemens and other manufacturers*

The complex solutions

Energy facilities design from 6 kV and higher

- Reconstruction and modernization of 6-20 kV switchgears.
- Reconstruction and construction of substations 330/35/6 (10) kV.
- Reconstruction and construction of distribution points (RP) 6 (10) kV.
- Reconstruction and construction of transformer substations (TS) 6 (10) / 0.4 kV.
- Modernization of 6-20 kV switchgears.
- APCS, ASKUE, telemechanics systems and automation of distribution networks.
- Routine work, preventive control of electrical installations up to 10 kV.

Automation systems engineering infrastructure of the building (BMS*)

The complex solutions

Systems management

BMS provide reliable and safe operation of construction engineering systems, as well as their monitoring, control and centralized management.

Flexible modular design allows you to build up and expand the system not only within the framework of one building, but also within the whole production complex.



- heating systems,
- ventilation,
- refrigeration (air conditioning),
- water supply,
- energy supply,
- energy consumption and lighting,
- indoor microclimate;
- other auxiliary engineering systems.

Automation systems engineering infrastructure of the building (BMS)

- Analysis and identification of factors that negatively affect the efficiency of the engineering infrastructure: increasing the periods of trouble-free operation of subsystems, optimizing service intervals and preventing potential emergency situations.
- Obtaining objective information in real time (24/7) and in the form of archived data, including remotely (in emergency situations - via SMS, Email, Telegram, Whatsapp, Viber messages).
- The ability to customize and write standard scenarios for the operation of engineering subsystems depending on the time of day, season, weekend and working days, etc.



The complex solutions

Building 1

Building 2

Building 3

Building 4

Dispatcher's place

The solution is built using modern software and hardware automation **EcoStruxure Building Operation** from Schneider Electric



in 2020-2022

- for the construction of multipurpose industrial buildings in the M1 quarter (A-08-01) of the territory of priority development of the Chinese- Belarusian CJSC Company for the Industrial Park Development, Belarus;
- for the central office of Sberbank, OJSC, Minsk, Belarus;
- for the production and logistics building Foreign unitary enterprise BelWillesden, Minsk, Belarus.

IT infrastructure systems

The complex solutions



- Server equipment.
- Data storage systems.
- Telecommunication cabinets and racks.
- Server and personal computers, peripheral devices.

Solutions are built using software and equipment from leading world companies such as HPE, Huawei, Dell, HP, Lenovo, Mitsubishi Electric, Schneider Electric, Rittal, MDV and others

- Uninterruptible power supplies (UPS) for IT equipment, as well as industrial and domestic use.
- Storage batteries for completing the UPS.
- Air conditioning systems for buildings and data centers, including precision air conditioning and chiller cooling systems.
- Modular server rooms for physical protection of various degrees of fire resistance and electromagnetic safety of the data center.
- Monitoring systems for the external and internal environment of the data center.
- Diesel generator installations.



- Development of technical specifications for the power supply of the facility in accordance with the requirements of the Technical regulations.
- Calculation of electrical loads of the design object, taking into account the characteristic features of engineering systems.
- Systems of external and internal power supply 0.4 kV and power distribution using panels, cabinets, shields for modular electrical installation.
- Power supply systems for data centers, server rooms, switching nodes and hardware facilities of the industrial and civil sector.
- Electric lighting systems.
- Decorative outdoor lighting of the object (with the involvement of architects, interior designers and outdoor lighting installations).
- Instrument metering and control of electricity consumption.
- Protective grounding and potential equalization, lightning protection and overvoltage protection systems.



in 2020-2022

- for Belgazprombank, OJSC, Belarus;
- for Belarusneft-Promservice, RUE, Belarus;
- for Belarusneft-Vitebskobnefteprodukt, RUE, Belarus;
- for Gazprom Transgaz Belarus, OJSC, Belarus;
- for Naftan, OJSC, Belarus;
- for ATLANT, CJSC, Belarus;
- for Eurotorg, LLC, Belarus *and others*.



in 2020-2022

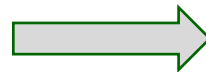
- for Belorusneft-Promservice RUE;
- for SPMK-81 OJSC;
- for Polotsk-Steklovolokno OJSC;
- for Beltelekom RUE;
- for Eurotorg LLC and others.

Integrated security systems

The complex solutions



- CCTV systems.
- Access control systems.
- Perimeter security systems.
- Security alarm systems.
- Thermal imaging systems.
- Systems of centralized control over the security of objects (top-level systems).
- Parking navigation systems and paid parking.



- for crowded places;
- for urban and street infrastructure;
- for industrial and construction sites;
- for energy and other strategic facilities;
- for transport facilities;
- for state institutions;
- for trade and logistics facilities;
- for banking and other financial institutions;
- for cultural institutions, sports institutions, healthcare institutions, educational institutions;
- for hotels;
- for residential, parking, etc.

Solutions are built using software and equipment from leading world companies such as Hikvision, ITV/Axxonsoft, Bolid, AlphaOpen, LTV, Milestone, Axis, Avigilon, RusGuard, Sigur, IPCom and others

Integrated security systems



Professional, including design video surveillance equipment



Creation of hierarchical and distributed systems security as local, and large-scale

CCTV and video analysis systems



Professional video surveillance software that includes access control system modules, time and attendance tracking, video wall management, security control and vehicle management, business analyst

Integrated security systems



Em-marine, Mifare, Mifare Plus, HID access cards

Программное обеспечение

Выдача пропусков Карта помещений с отображением событий Интеграция с видеонаблюдением



Надежная IP сеть

Аппаратное обеспечение



Контроллер



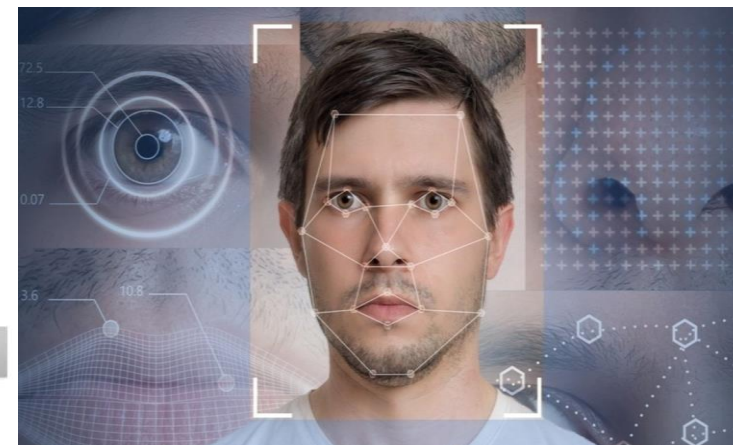
Сервера



Система хранения

Techniques of identification

Access control systems



Multifunctional access control systems using the latest recognition tools: fingerprints, 3D face models, vehicle registration numbers and other parameters

Integrated security systems

Thermal imaging systems

Identification of persons with elevated body temperature

- Thermal imaging video surveillance systems, including those including special devices - temperature calibrators, which allow a minimum measurement error not exceeding 0.3°C.
- Intellectual access managing systems with face recognition functions, including masks, and with a temperature measurement accuracy of more than 99%.

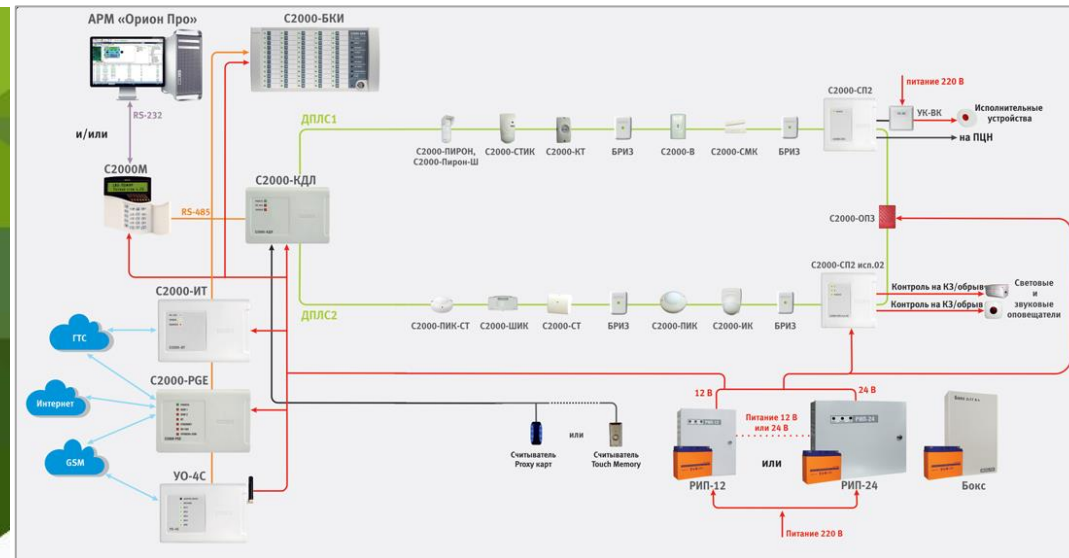


Intellectual access managing solutions are built on high-tech Hikvision equipment with intelligent analytics, precision algorithms and dual-spectral mode (optical and thermal) to monitor the situation

Integrated security systems



Security alarm systems



- Timely and error-free detection of unauthorized intrusion of violators, including transport equipment, into the protected area.
- Recording in the standby mode of alarm events at the protected object with the display of alarm zones on the monitors of the duty service.
- Functioning of an arbitrary number of security systems (perimeter, video surveillance, thermal imaging) operating in a single information environment. Integration with the installed security systems at the guarded facility into a single system.

Solutions are built using software and Bolid equipment, which meets modern requirements and standards

Integrated security systems

Perimeter security systems

They are built on various sensitive elements, depending on the situation and configuration of the protected object

Electromechanical elements

Vibration elements

Capacitive elements

Radiobeam elements

Optoelectronic elements

Radio waves the elements

Fiber optic the elements

Magnetometric elements

Seismic elements

Infrared elements

Место оператора



Сервера



Системы хранения



Надёжная IP-сеть

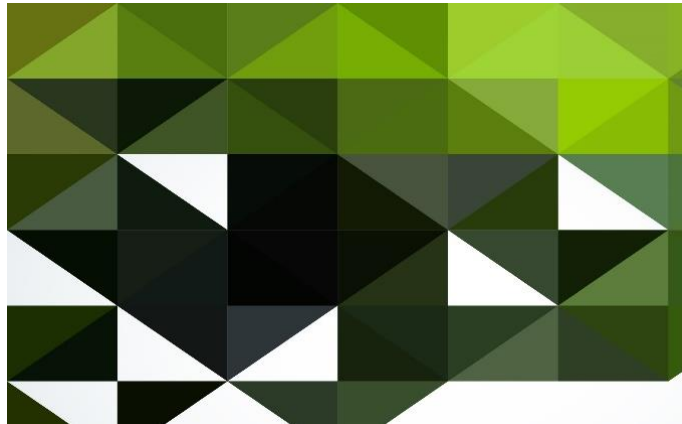
Контроллер



Полевой уровень датчики



Integrated security systems



Parking navigation systems and paid parking

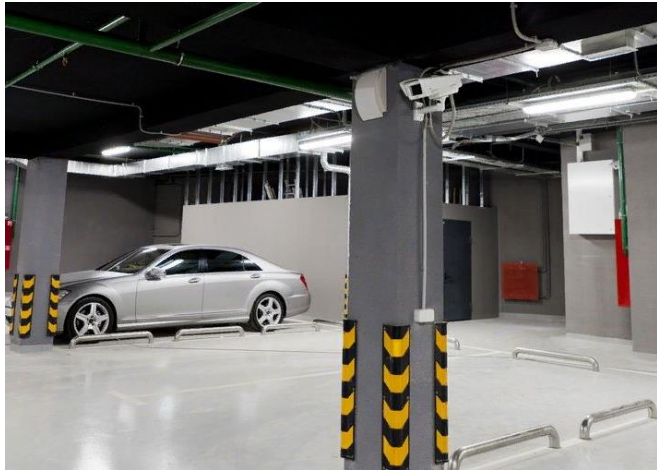


Paid parking systems

- Automation of the time tracking process, calculating the cost of parking, payment systems.
- Monitoring system events in real time.
- Possibility of reconciliation of numbers and external condition of vehicles.
- Access control.
- Control and analysis of the financial activities of the parking.
- Increasing the speed of customer service in the parking lot.
- Reducing staff costs.

Parking navigation systems

- Convenient orientation of visitors in the parking lot with the ability to quickly and comfortably find a parking space.
- Light zoning of parking spaces (occupied / vacant).
- Increase in the occupancy rate of parking up to 100%.



in 2020-2022

- for the central office of Sberbank, OJSC, Minsk, Belarus;
- for the Grodno regional customs, Belarus;
- for the administrative building of the KGB in the Vitebsk region, Belarus;
- for the construction of a secondary school No.224 with a swimming pool for 1020 students in the Loshitsa-9 microdistrict in Minsk, Belarus;
- for the construction of a mining and processing complex with a capacity of 1.1 to 2.0 million tons of potassium chloride per year at the raw material base of the Nezhinsky (eastern part) section of the Starobinsky potash salt deposit, Belarus;
- for the reconstruction of the court building of the Zhabinka district of the Brest region, Belarus;
- for Lazurit residential complex at the intersection of Pobediteley Ave. - Narochanskaya St. in Minsk, Belarus;
- for MMPZ-group, LLC (Miory metal rolling plant), Belarus *and others*.

Audiovisual systems

We create a single, technically advanced information and communication space for monitoring and control, as well as for holding business and entertainment events of various formats and scales.

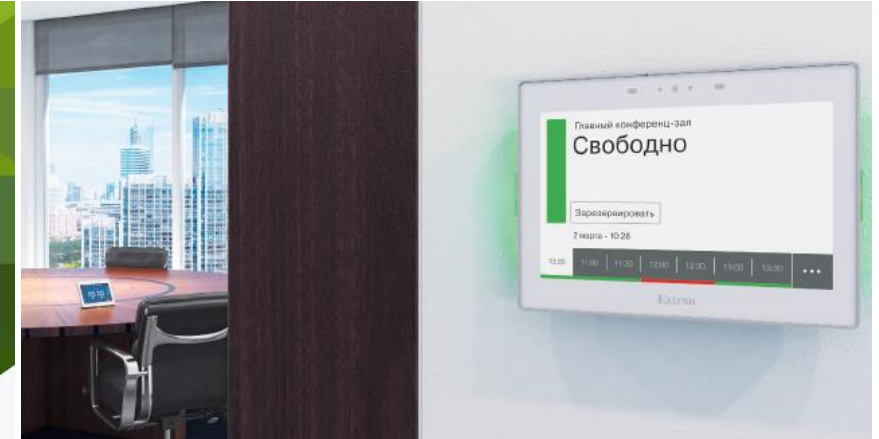


The complex solutions



Solutions are built using software and equipment from leading world manufacturers such as Samsung, Mitsubishi Electric, SHARP, SHURE, NEC, Datapath, Extron, Kramer, iRidium mobile, AMX, Cisco, Yealink and others

Audiovisual systems



The complex solutions

- Professional liquid crystal and LED information display systems, including split-screen solutions (video walls).
- Multimedia equipment for various purposes (projectors, projection screens, etc.).
- Digital Signage systems.
- Sound and sound reinforcement systems.
- Conference systems (microphone subsystems).
- Equipment for video conferencing, recording and broadcasting (video cameras, recorders and streamers).
- Simultaneous translation systems.
- Management and booking systems for meeting rooms.
- Wireless presentation systems.
- Stage lighting equipment.
- Automatic screening equipment.
- Equipment for switching and operational management of media content (controllers, control panels).

Audiovisual systems

Customers & Reference Objects



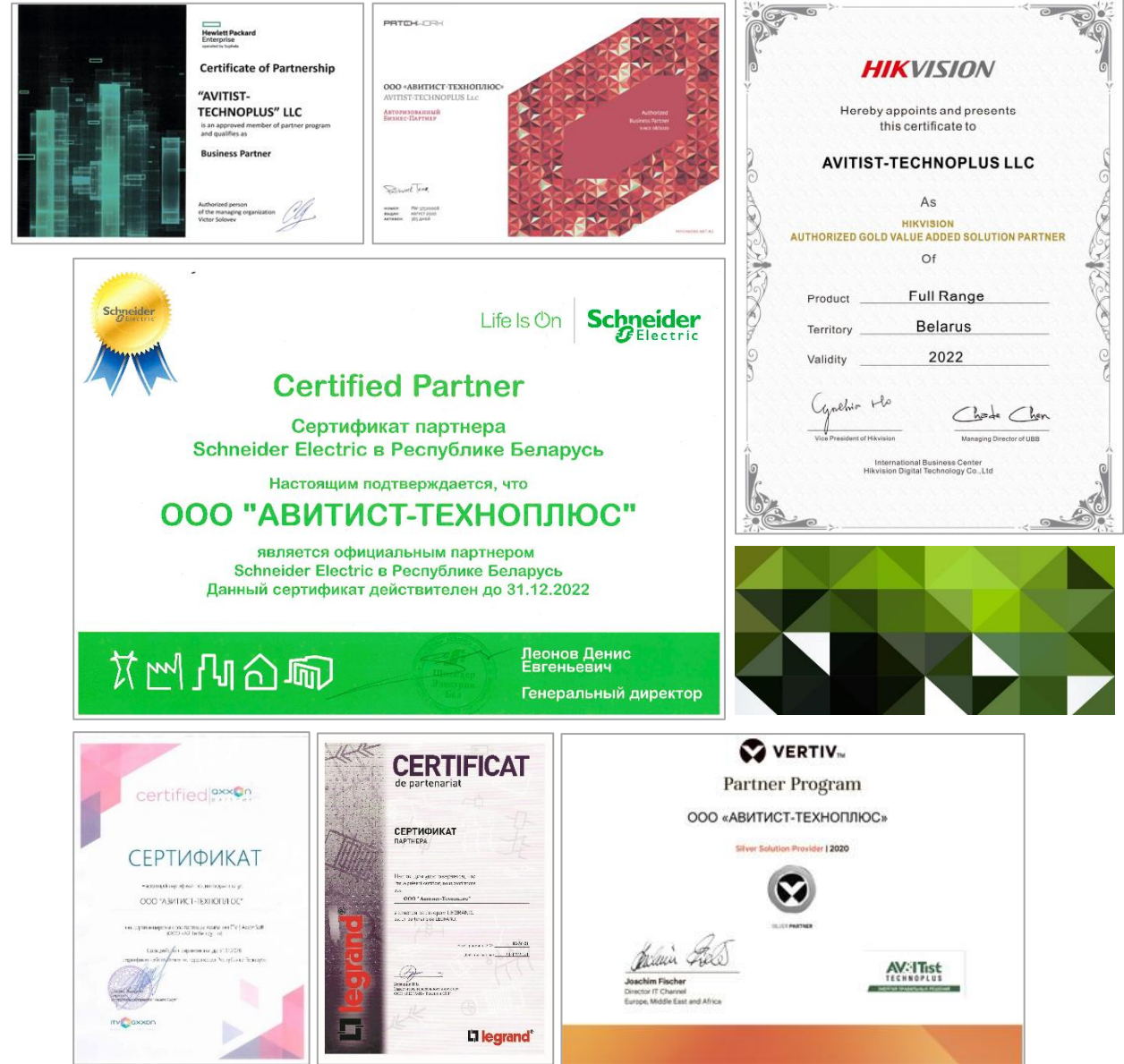
in 2020-2022

- for the central office of Sberbank, OJSC, Minsk, Belarus;
- for the Minsk Scientific and Research Center of Surgery, Transplantology and Hematology, Belarus;
- for the City Children's Infectious Diseases Clinical Hospital in Minsk, Belarus;
- for the Republican Center for Olympic Training in Winter Sports Raubichi, Belarus;
- for the Minsk Central Customs, Belarus;
- for the Grodno Regional Customs, Belarus;
- for the Office of Administrative and Economic Support (central bodies of military command), Belarus;
- for Alfa-Bank, CJSC and others.

Certificates and Licenses

AVITIST-TECHNOPLUS company builds productive relationships with leading manufacturers and offers equipment and software brands that have won a high rating and reputation.

Official partner statuses are confirmed by appropriate certificates and long-term contractual agreements



For more information about the vendors see here: www.avitist.by

THE ENERGY OF THE RIGHT DECISIONS

Technical Competence

The activity of AVITIST-TECHNOPLUS LLC is licensed and confirmed by documents of conformity of the competent state bodies, which, if necessary, are provided to customers



Customers



Fuel and energy enterprises



Industrial enterprises



State institutions



Telecommunication companies



Design institutes



The big business and medium-sized companies



Refining and mining organizations

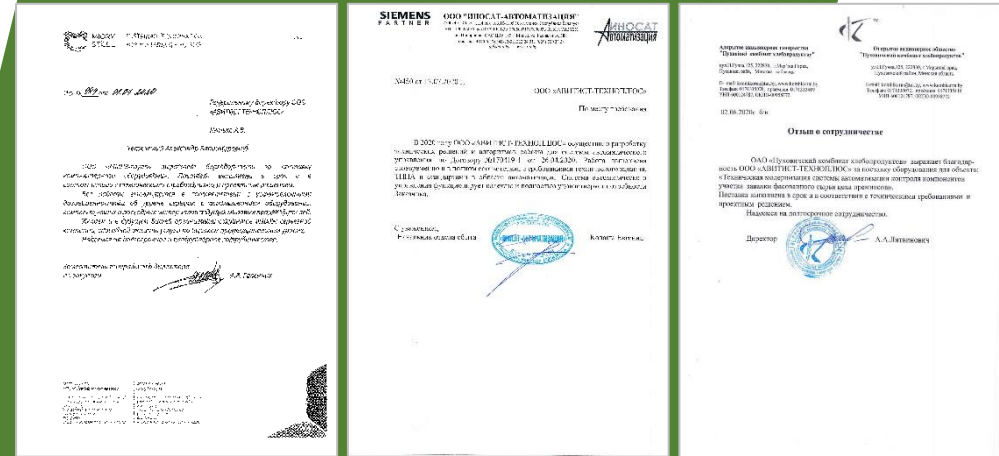


Infrastructure facilities for healthcare, education, sports, retail and entertainment industry, banking



Transport and logistics organizations

Reviews



For more information see here: www.avitist.by

We are open for cooperation
and are ready to offer the right solutions for your projects

AVITIST-TECHNOPLUS, LLC

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AVITist
TECHNOPLUS

ЭНЕРГИЯ ПРАВИЛЬНЫХ РЕШЕНИЙ