

bocom

ENERGY- MANAGEMENT

WITH THE bocom INSTALLATIONSBUS-SYSTEM

**CLIMATE
LIGHT
LOAD** &



**Equipment
Re-equipment
New building
Old building** &

**INTEGRATED OPTIMIZATION OF ENERGY CONSUMPTION,
USING COMMUNICATION bocom BUS SYSTEM.**



Buildings of the future

Modern equipment of our immovable property is always versatile and depends on various factors. To the major demands towards buildings of the future belongs the ability to be adapted, namely- the necessary freedom and flexibility along with efficient treatment of energy. Not changeable elements of the building, as for example its body, will have less and less meaning in the future.

Dynamics of expenses of the whole cycle of building's existence is such that the significance of the costs moves to exploitation expenses and additional costs, which appear as a result of adjustments to consumers' needs. Static exploitation turns into dynamic changes and renovations.

In the modern approach to building the leading position is occupied by the initial investments, which turn out to be economically not rational. The task is to find the optimal ways of saving energy and corresponding to ecological demands, which would come in contact with buildings' climate functions, lighting, sun protection, type of usage and security.

Such types of technical solutions are suggested by the management system, applying communication Bocom bus system. With the help of this system the freedom, which seemed impossible till the moment, can be achieved. Reconfiguration is done simply via change of parameters.

In the frames of energy management is the inside, outside and also auxiliary light controlled and such management the constant level of lighting for work places is achieved. Optimization of lighting provides more comfortable conditions in the building and also reduces energy consumption.

Regulations of the temperature in separate rooms controls their climate according to the schedule of usage and depending on the current need.

Heating systems, cooling systems and ventilation systems are set and controlled for each room separately and according to the schedule of usage of internal and external temperature and also the content of carbonic gas.

Energy saving up to 30 % is real!

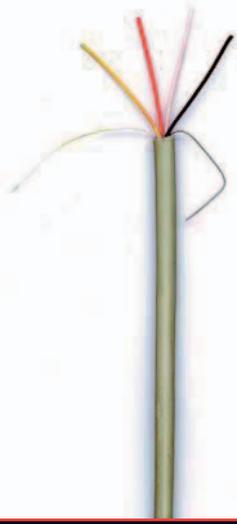


Load of the consumer serves the basis by the calculation of the capacities and prices for energy. Limitation of the consumption, set by the System of Energy consumption along with split in time switching of consumers, reduces the load during rush hours. At the same time it is possible to set the priority for certain consumers. In this way the calculated capacity is reduced, this allows to choose more convenient tariffs of the supplier.

Optimization of the energy consumption makes a sufficient contribution into economic functioning of the buildings and significantly reduces harmful influence on the environment.

Management of energy consumers in the buildings means provision only of such quantity of energy to the consumer, which is needed in concrete place and at the given time.

The management system presented here corresponds to all these demands. It was worked out for equipping of the new buildings, but first of all for modernization of the existing ones. As a rule, the already existing communications in the building might be integrated into the communication system.



Nerve of the system – communication bus of bocom company.

Being done as a system of data collection, double – conductor communication bus-bar ensures the information exchange between sensors and executing elements.

Assembly of communications is done parallel to the existing electric wiring. Supply of electricity goes directly to the consumer, thus there is no need to make wiring separately via power switches.

CLIMATE LIGHT & LOAD



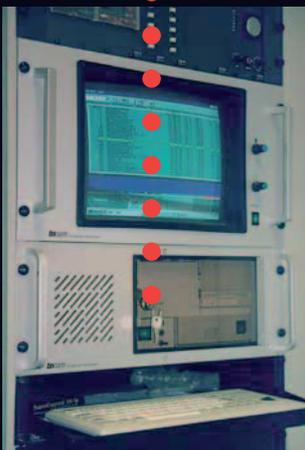
Management system of bocom company integrates all three levels of the management system and guarantees entire optimization of general energy consumption. The management levels are built of modules in such a way, that there is the possibility in case of need to use each module separately.

Lighting, climate of the room and consumption are set and regulated based on individual need. Each consumer is connected via communication rail to the corresponding management level, and the system allows to control the energy consumption and to optimize it with the help of the set parameters.



Communication bus-bar (bocom-bus-System), along with three levels of energy management, provides the following additional functions as fire alarm or breaking in alarm, also informing about system faults per telephone or other communication channels.

In this way, the system suggests functioning, which would ensure the energy management either in new building projects or for modernization.



Briefly about the advantages of the bocom energy management system:

1. Electric assembly :

- Usual planning and connection of the components with each other;
- Reduction of the wiring length (simplification of the system, marginal expenses for materials);
- Marginal assembly costs;
- Subsequent changes without additional wiring;
- Fire safety;
- Reusing of the former switches during modernization of old buildings.

2. Management and regulation of lighting:

- Lighting, regulated depending on time and presence of people;
- Lighting, regulated depending on the outside lighting;
- Creating the schedule for working hours for inside lighting;
- Automatic informing in case of defects finding;
- Individually selected management for rooms and remote control;
- Control of jalousie;
- Control of diming – out systems (curtains and so on).

3. Regulating of the temperature of particular rooms :

- Automatic stopping of warmth supply by the opened windows;
- Accuracy of regulation is average of +0,2/-0,3C;
- Regulating of the temperature with forecast;
- Regulating of the temperature according to the schedule and current need.

4. Load optimization:

- Reduction of peak demand ;
- Reduction of power and tariffs.

5. The system also provides:

- Transmitting of the alarm signal to the corresponding organization and/or corresponding persons via various communication systems;
- Timely identification of ignition and fire danger;
- Ensures protection from freezing of communications;
- Tariffs' scheme for particular consumers.



Contact us.

The management system of bocom company is an integral one and considers all the factors, which influence the energy consumption in the building, centrally controls all the consumers and balance of energy. The system reduces the expenses of the consumer and credits and also sufficiently reduces the harmful influence upon the environment.

Our engineers will conduct all the necessary events for fulfilling the project either at the place or based on the building schemes and will also provide consultations for you concerning all possible questions you might have.

