Building Integration

Grootech

Buildings Automation System

1 Infrastructure Monitoring (BMS)

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Data Center monitoring for Smart Building systems

- **Fire alarm system**
- **Security and access control management**
- **Climate Control**
- **Electricity Distribution and Power Supply Management**
- **Elevators**

10 times faster development in comparison to traditional platforms

70% cost decrease

1 Infrastructure Monitoring (BMS)

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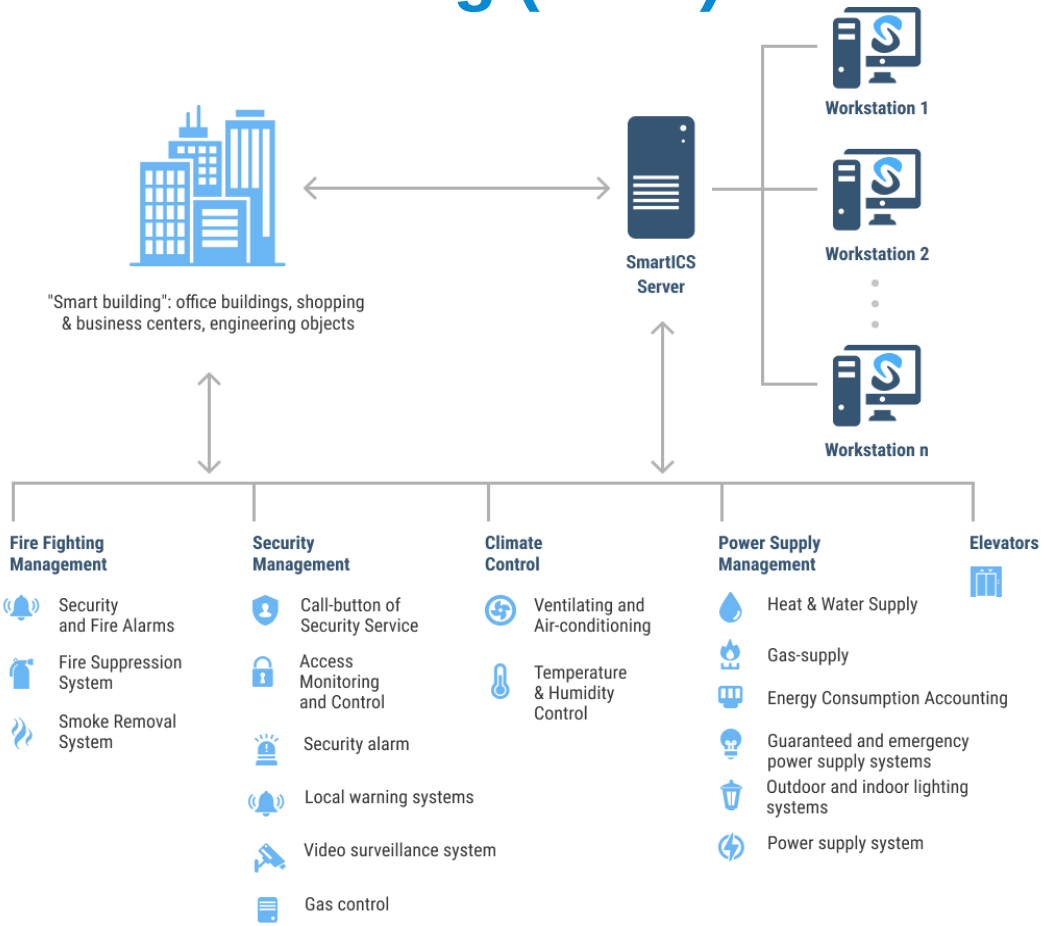

2

Lighting automation

Automation system for indoor lighting of the building

grootech

- **Optimum Area**
- **3 separate buildings**
- **DALI touch switches**
- **DALI lighting controllers**
- **LED lights with DALI interface support**

2 times faster project development

30% maintenance cost decrease

2

Lighting automation

Automation system for indoor lighting of the building

- Automated control lamps and control of the entire lighting system from a single point
- Adjustment of seasonal and daily lighting modes to reduce energy cost
- Up-to-date information about the malfunction of lamps for timely maintenance and replacement of lighting lamps
- Increase the level of comfort for employees' work
- Alarm setting and alarm message management

2

Lighting automation

Automation system for indoor lighting of the building

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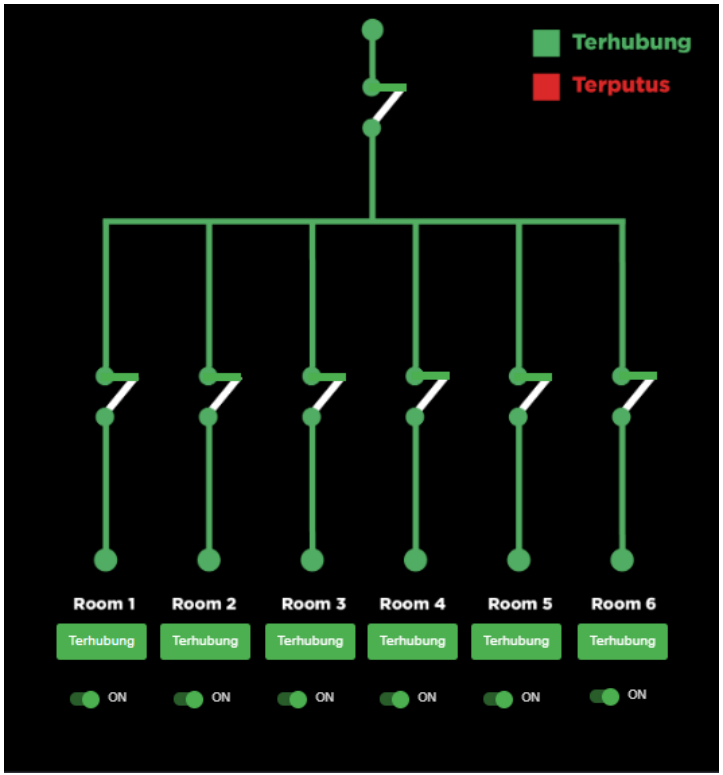


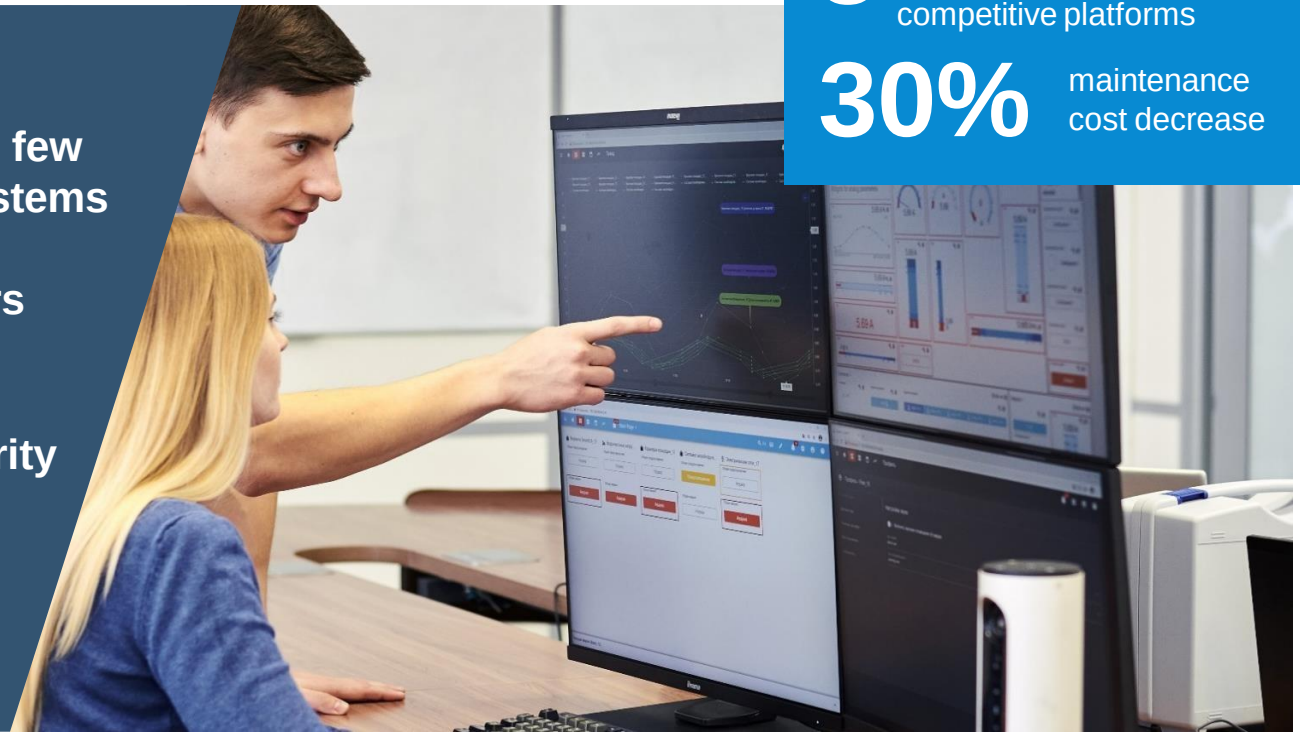
- Automated control Lighting and control of the entire lighting system from a single point
- Turn off and turn on the lights
- Knowing which one is disconnected and connected

3

Building automation

Status control and power supply monitoring

- Office area
- Needed to centralize few existing and new systems
- Parking and elevators added to scheme
- Fire alarm and Security (door lock)
- Power monitoring



3 times faster project development than competitive platforms

30% maintenance cost decrease

3 Building automation

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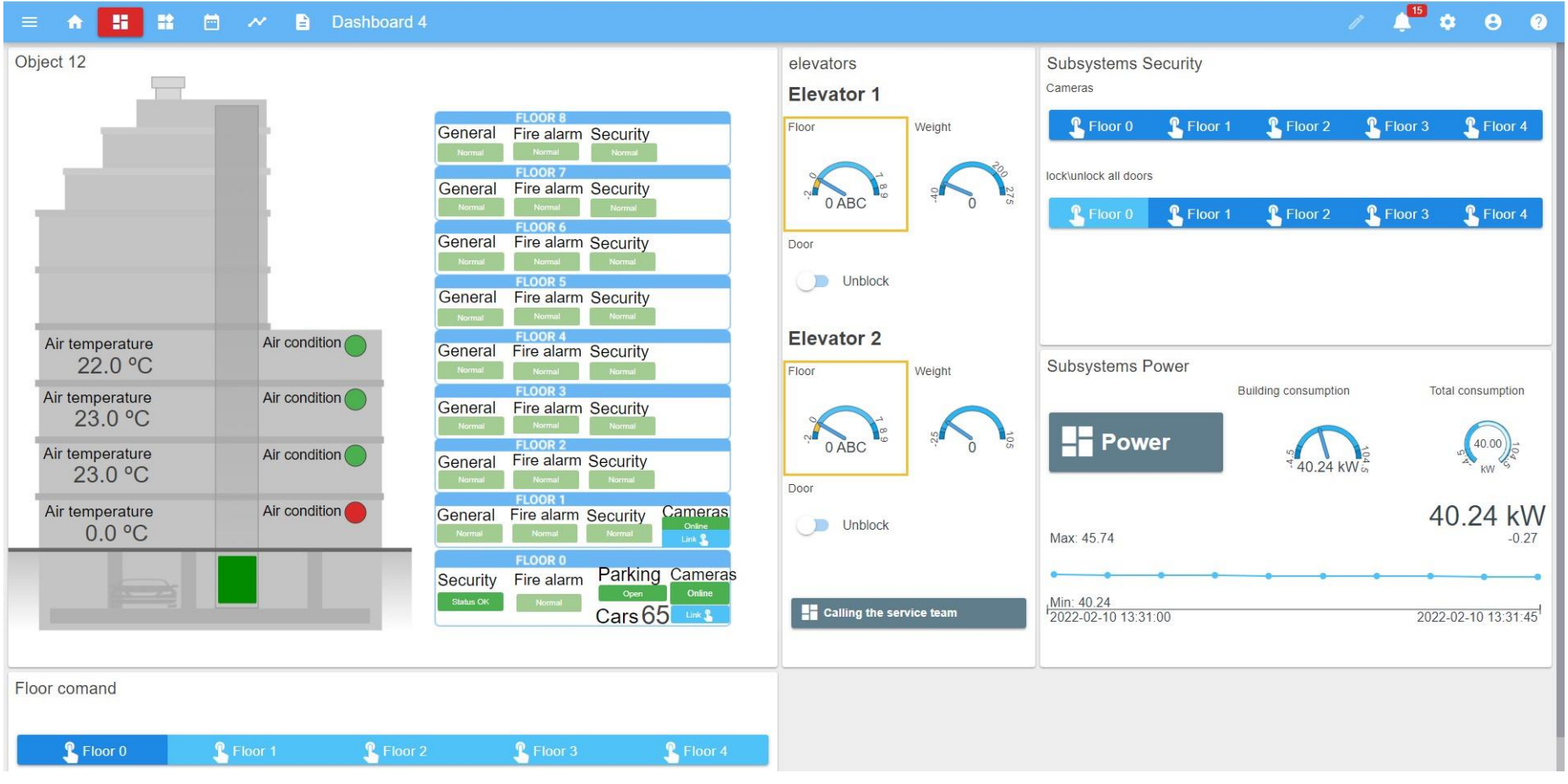

3 Building automation

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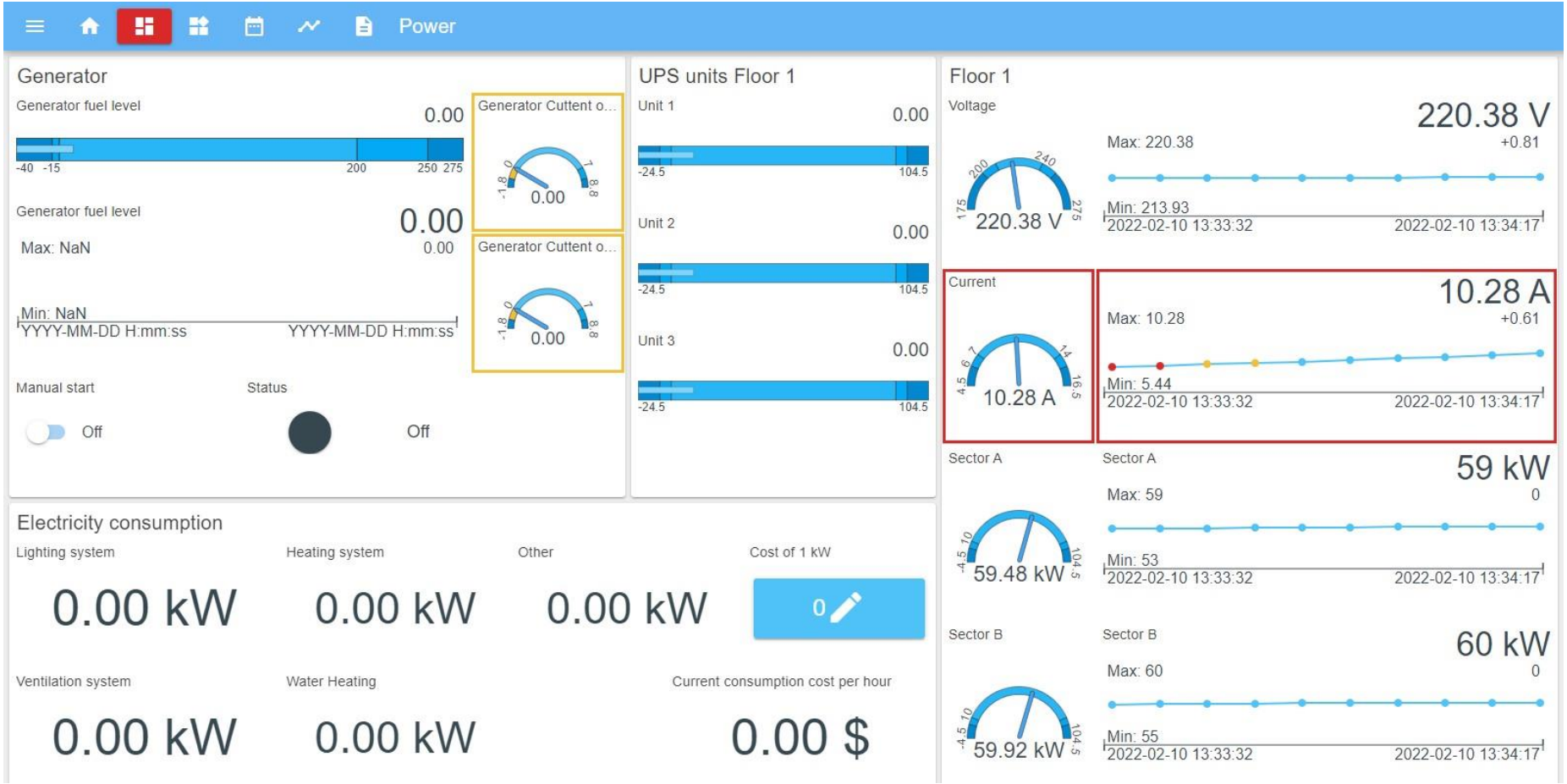

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Building automation

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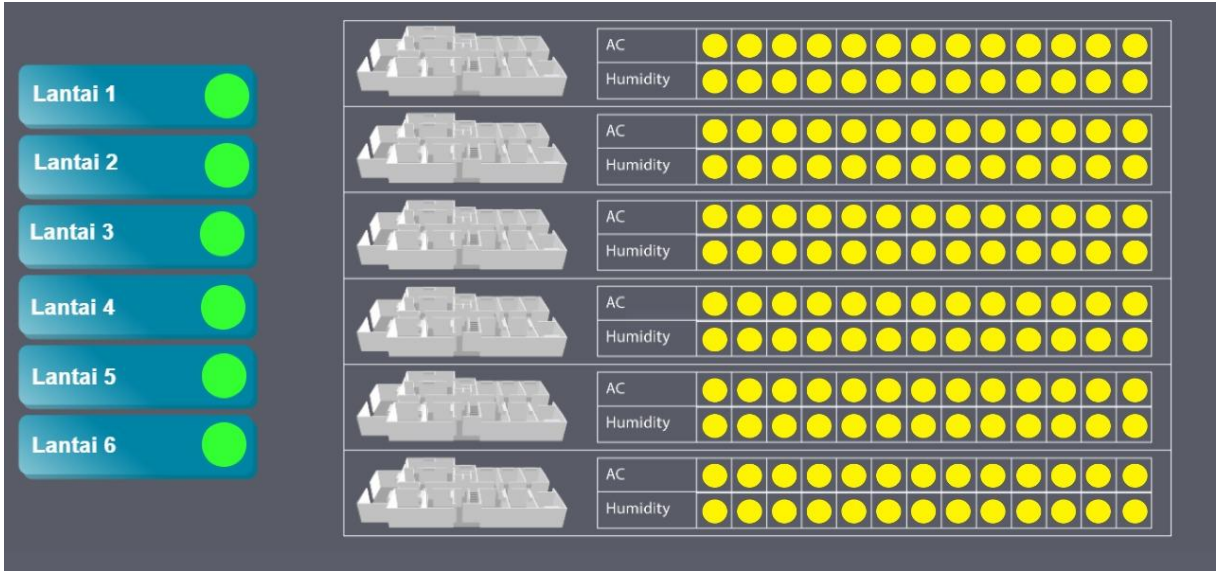
Automation system for indoor Temperature and Humidity Monitoring



- **PLC condition monitoring every floor**
- **Monitoring the condition of air conditioning and humidity sensor**
- **Notification when there is a disruption in connectivity**

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Building automation

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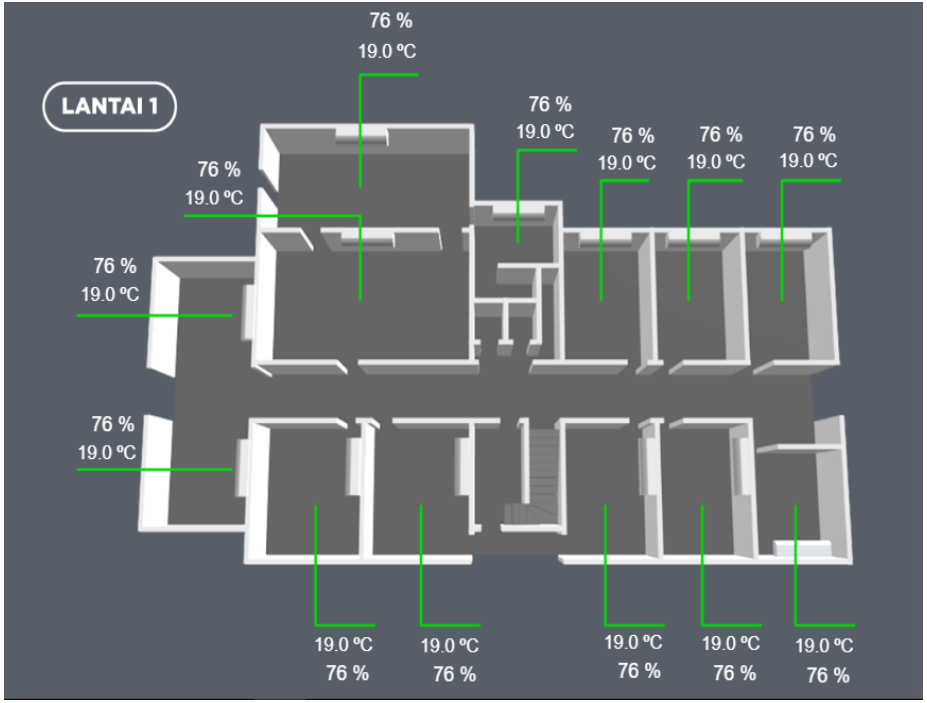
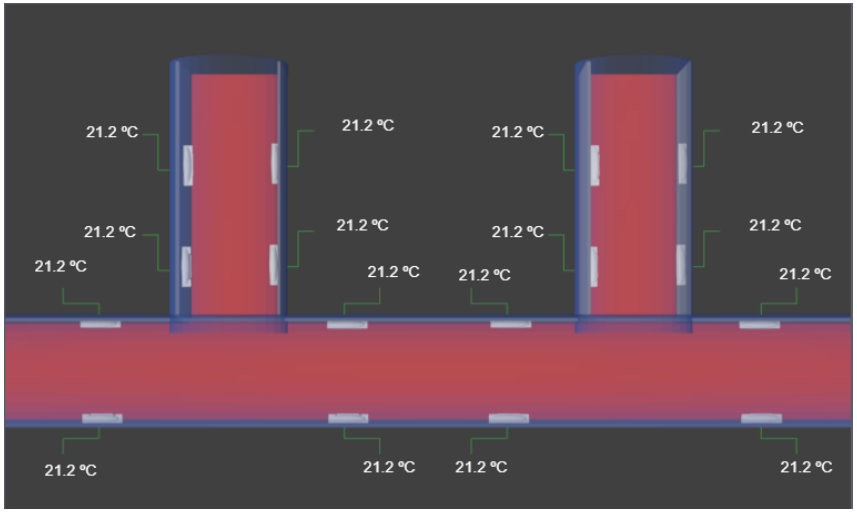
Automation system for indoor Temperature and Humidity Monitoring



Displays the actual temperature and humidity of each floor and even every room



Building automation

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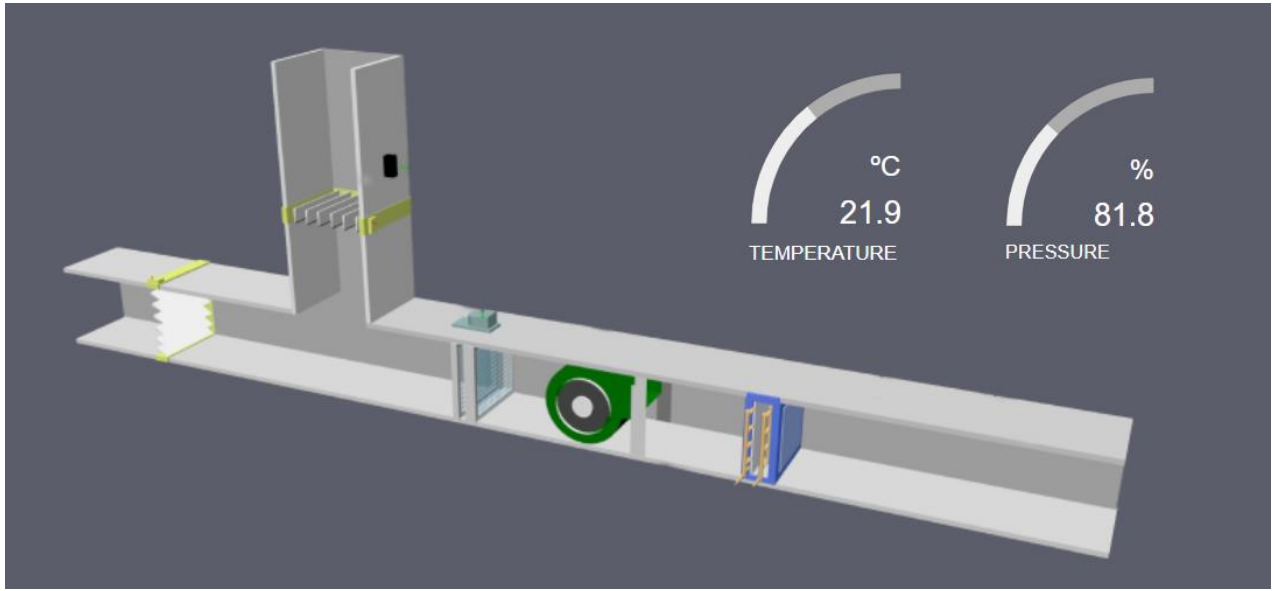
Automation system for Air Handling Unit



- **Displays the actual temperature and Pressure**

4

Building automation

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CENTER OF BASALT TECHNOLOGIES (Russia)

- Centralized Control Room
- Ventilation
- Boiler room
- Heating center
- Complete transformer substation

4 times faster project development than competitive platforms

35% maintenance cost decrease

4

Building automation

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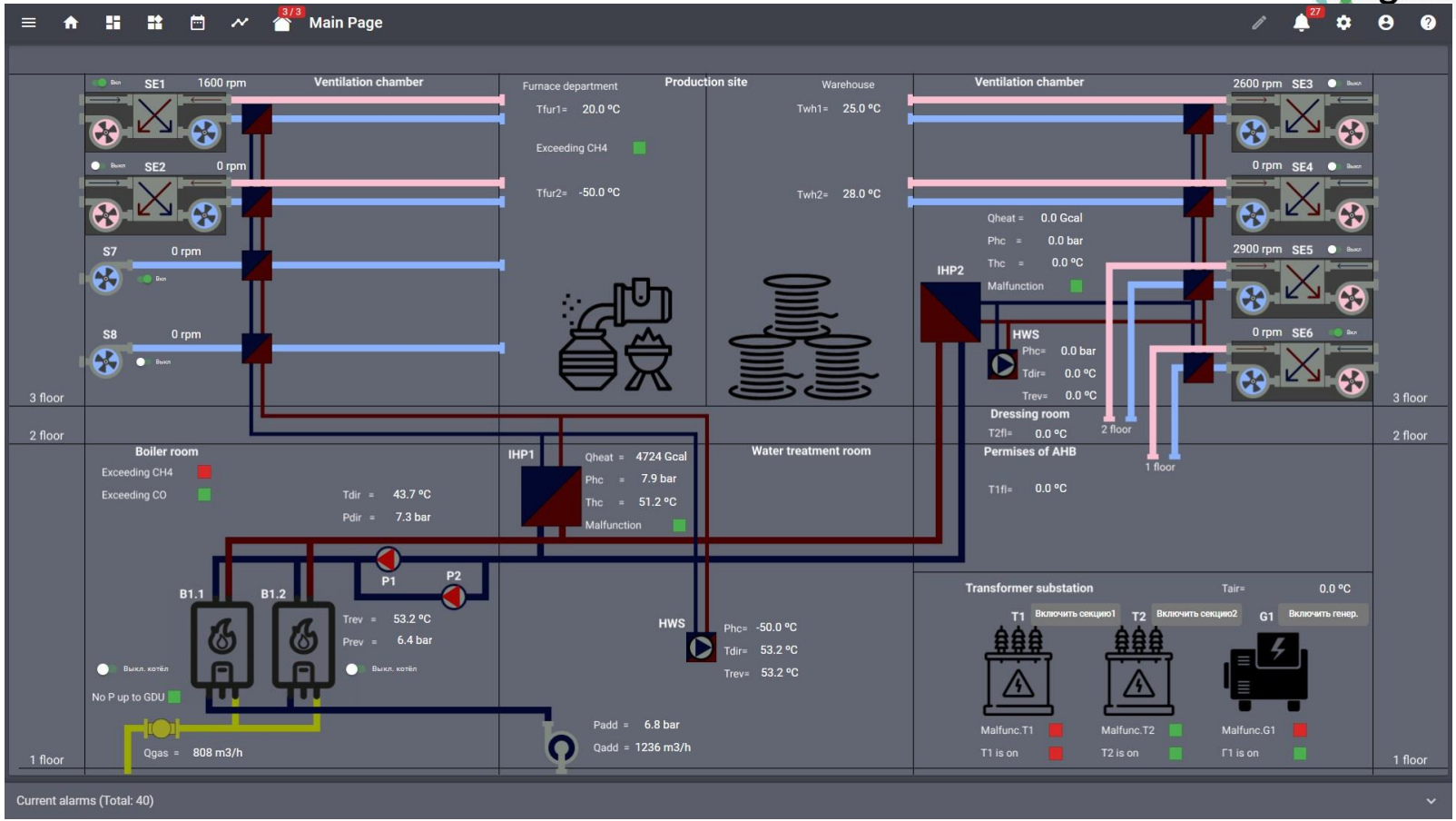

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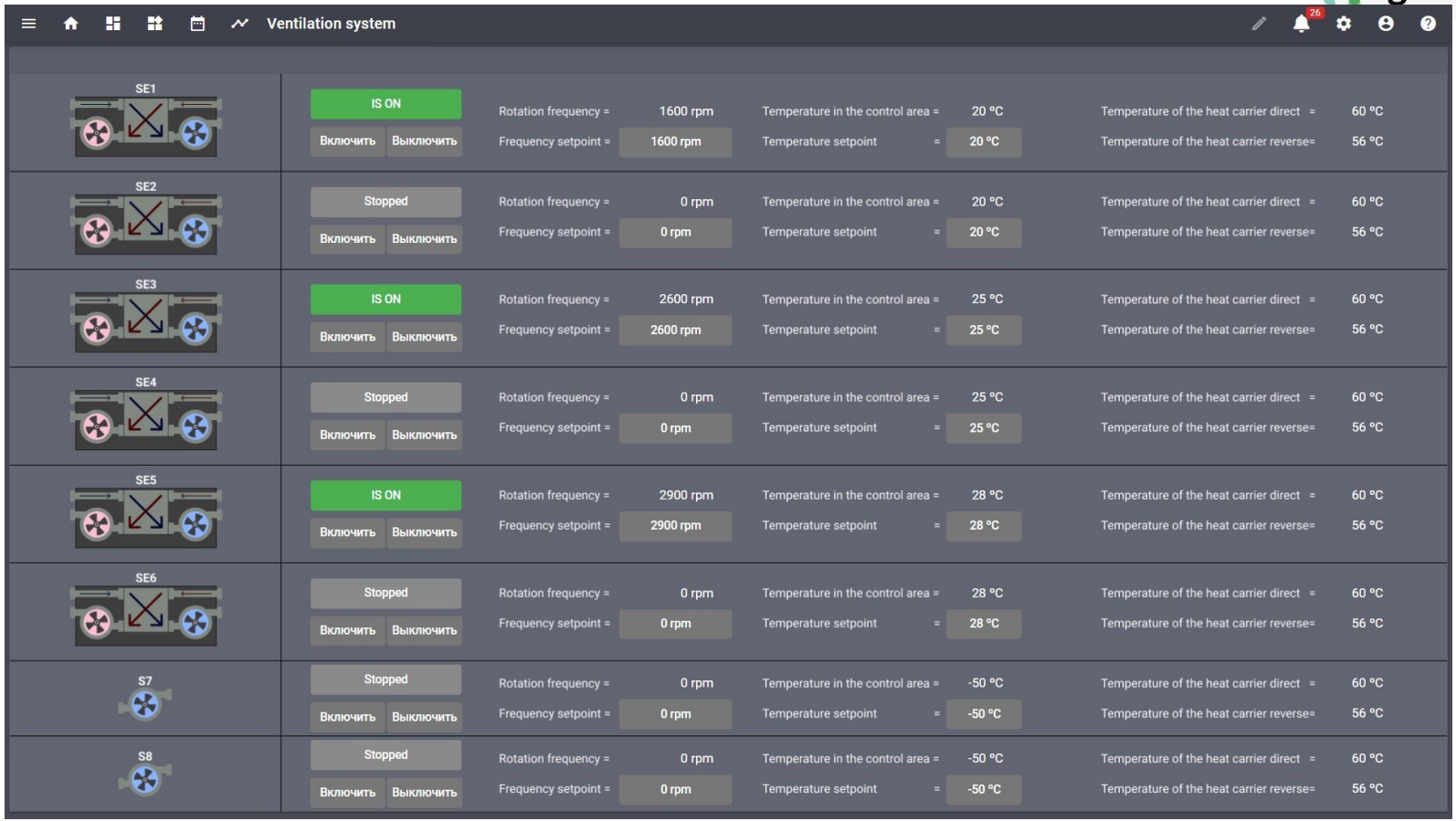

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Building automation

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4

Building automation

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