

A photograph of a modern residential building complex. The buildings are multi-story with balconies and large windows. In the foreground, there is a paved walkway made of blue and grey bricks, a green lawn, and a tall black street lamp. The sky is blue with white clouds.

Hoval

HovalSupervisor cloud

A solution tailored to your needs!

efficient | individual | reliable



Efficiency that saves you money: HovalSupervisor cloud

Everything from a single source

Which business model do you use to make your money? With HovalSupervisor cloud, you can decide for yourself what works with your business model and what doesn't – which means your individual requirements will determine the service you get from us. This sets us apart from our competitors who, for the most part, only offer standard solutions aimed at as broad a target group as possible. We will help you and show you which potential you can harness for additional efficiency and profit.

When it comes to energy supply, operators such as housing associations, hoteliers, contracting firms, energy suppliers and district heating suppliers often find that their systems are incurring unnecessary additional costs. This may be due to a number of reasons: a lack of information, standard solutions, compatibility problems or insufficient system monitoring. The potential for savings can be leveraged when an operator's systems are intelligently networked to the required depth.

HovalSupervisor cloud provides system operators with a clearly arranged, resource-friendly solution for managing their systems and ensures reliable operation – from anywhere and at any time, via PC, tablet or smartphone. The management system allows systems to be visualised, controlled and monitored from a single location.

System data is monitored on a continual basis and any deviations are signalled to the operator

immediately. If action needs to be taken, they can respond quickly and access the necessary parameters. Graphic analyses make the figures easy to understand and allow tailored optimisations to be carried out.

The software was developed with a focus on simplifying everyday tasks. The cloud solution saves time and, above all, money – especially when managing multiple buildings and, hence, various energy systems.

Cloud solution offers clear advantages

For many customers, maintaining their systems via remote access is now a matter of course. A few years ago, a server installation on site was all that was needed for HVAC applications. Recently, however, cloud solutions have become much more popular owing to their numerous advantages. This is based on a number of reasons:

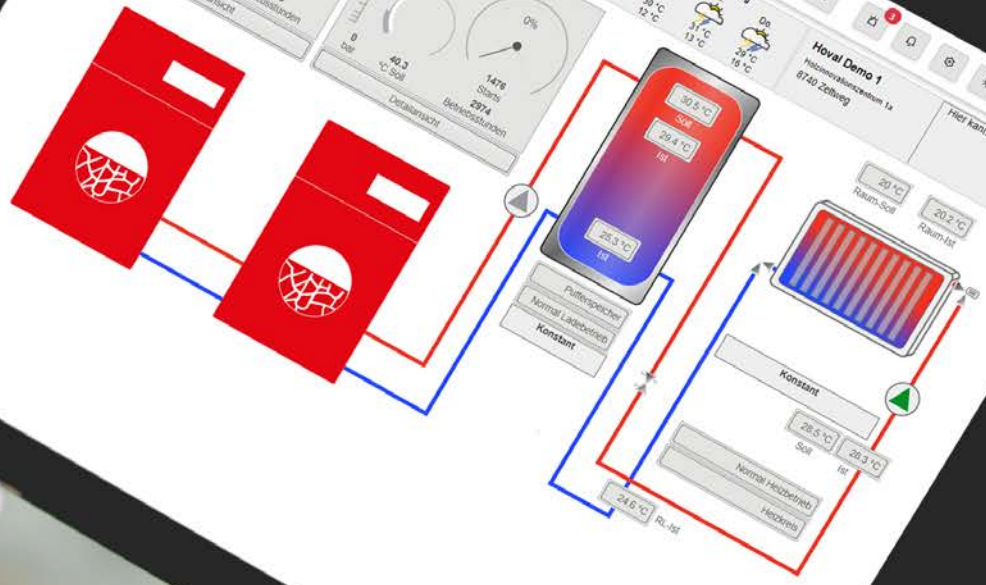
- Continuous increase in IT administration work
- Limited ability to respond when action is needed
- Additional costs due to VPN connections, backups, virus and data protection, system updates, defence against cybercrime and lack of compatibility

HovalSupervisor cloud helps you to avoid these problems and eliminates additional costs.



1 [CS] - Hotel WP

Hotel WP
Energieerzeuger



All requirements for a cloud management system

- No complicated installation work
- No maintenance costs for hardware and software
- No IT support required for setup and maintenance
- No investment costs for hardware

One of the biggest differences compared to on-site installation is that a cloud solution does not require extensive installation. As a result, no expensive IT support is required for setup and maintenance. After registration, the product is ready for immediate use. The only cost that arises with Hoval is the annual flat-rate subscription.

HovalSupervisor cloud – everything from a single source

- Fulfils all functions of a SCADA system
- Third-party systems and external data sources can be integrated
- Virus and data protection continually updated
- Interfaces for integrating external data sources

Integrating third-party systems and external data sources

In contrast to customary online solutions, HovalSupervisor cloud makes it easy to integrate third-party systems and external data sources into the system. This includes MQTT, Modbus, BACnet, KNX, OPC, OPC UA and various PLC protocols. Furthermore, data sources can be connected on site via M-Bus, S0 or OpenTherm via the control system. Even systems without a communication protocol can be integrated via a special data logging module by means of switching contacts, analogue signals and sensor readouts.





Everything at a glance: HovalSupervisor cloud

HovalSupervisor cloud is a professional control and asset management system which indicates the health of all systems and their optimisation potential. This provides an overall picture of heat generation and distribution systems, domestic water heating systems and indoor climate systems. It is even possible to integrate old systems, third-party systems and external data sources. Whether you are operating a boiler, district heating or cooling systems – with HovalSupervisor cloud, you can keep an eye on everything via a single interface.

HovalSupervisor cloud visualises all system parts and brings them together to profitable effect.

Regular reports detailing the system data, reference values and any deviations can be provided on request. Having transparent information about the system performance makes it possible to reduce the use of primary energy sources significantly. Furthermore, the high-quality data enables forward planning of maintenance and optimisations.

- Monitoring and control of all systems (including third-party systems)
- Reliable remote maintenance – from anywhere and at any time
- Diverse analysis and optimisation options
- Configurable notification management and reporting
- All features of a SCADA system

Boosting efficiency with predictive control

By using location-specific forecasts for outdoor temperature and sunlight, energy savings can be achieved while also increasing comfort at the same time.

Predictive control prevents the indoor climate from becoming too warm or too cold, which also boosts efficiency.

up to **12%**
energy savings due to predictive control*

Optimised system operation

HovalSupervisor cloud enables you to get maximum efficiency from your system: Extensive analysis tools and settings result in significant savings when it comes to energy costs.

For example, trend diagrams for important data points allow unnecessary energy losses to be identified and the energy consumption to be optimised by adjusting parameters and time programmes.

up to **10%**
additional saving with simple optimisations

* According to a study by the University of Zagreb.

A solution perfectly tailored to your needs

HoValSupervisor cloud features a user-friendly interface to ensure straightforward operation.

From residential construction and property management to trade, the hotel industry, energy suppliers, district heating suppliers, municipal utilities and contracting firms – HoValSupervisor cloud provides solutions tailored to the needs of all kinds of operators, whether they manage small and medium-sized systems or entire district heating networks. Customers can choose between Configured Solution, Engineered Solution and District Heating Network.

Reporting

During day-to-day operations, there is often little time to keep an eye on energy costs and system efficiency.

HoValSupervisor cloud sends regular PDF reports via e-mail to ensure that you don't miss a thing. Keeping you informed of your systems' efficiency in this way means that you can make optimisations at any time if needed.

You can decide what you want to be informed about – the reports can be tailored completely to your needs.

Configured Solution (CS)

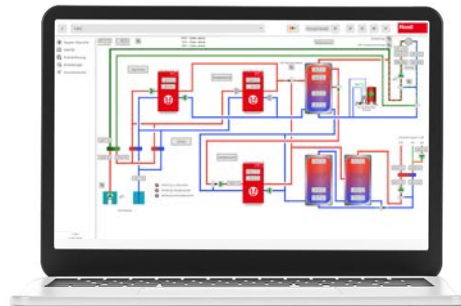
Clearly structured, easy-to-understand presentation with TopTronic® E controller



- Simple, standardised, clearly arranged visualisation with minimal initial setup
- Intuitive operation for quick, convenient adjustments
- If required, full access to the TopTronic® E parameter tree so the system can be operated as if on site
- Analysis and optimisation options
- Modular expansion options

Engineered Solution (ES)

Individual, detailed visualisation with special functions for systems with TopTronic® E, DDC* or PLC controllers



- Individual, detailed visualisation based on your requirements
- Tailored visualisation for more in-depth operability
- Programmable functions, e.g. for visualising ground water pumps
- In-depth analysis and optimisation options
- Individual expansion options

* Direct Digital Control (various heating controllers)

Functions

A logically structured menu guides users through the programme. In just a few clicks, the desired data of energy generators, controllers or consumers can be seen:

- Visualisation of system statuses, actual and nominal values
- Graphic display of heat generators and heat distribution
- Overview featuring all controllers and heat meters, temperatures and data
- Visualisation of the amount of heat delivered, (instantaneous) output, frequencies and efficiency values
- Consumption analysis
- Overview of DHW and heating circuit switching times to optimise load profiles
- Weather forecasts
- Cartographic representation of all connected systems and consumers
- Energy balance for energy centres, energy generators and consumers

Engineered Solution (ES) for indoor climate systems

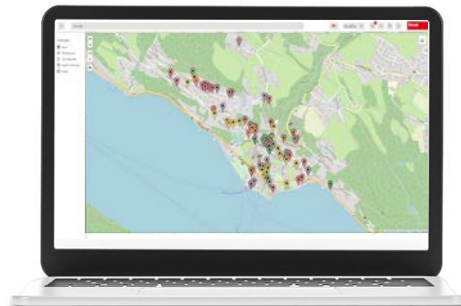
Individual, detailed visualisation with special functions for systems with TopTronic® C controller



- Detailed visualisation of indoor climate systems with RoofVent® and TopVent®
- Detailed visualisation of Hoval heat generators for heating and cooling
- Clear presentation of zone separation, operating modes and alarms
- In-depth analysis and optimisation options
- Basic modular configuration and individual expansion options

District Heating Network (DHN)

Solution tailored to district heating networks with full overview and evaluation across all systems



- Detailed visualisation of energy centres
- Clear listing and visualisation of all systems of district heating customers
- Detailed efficiency analysis options using graphs and tables
- Easy readability of all heat meters



Reliability guaranteed: HovalSupervisor cloud

Reliability is an important – if not the most important – prerequisite for efficiency. This requires two things: a management system and networking with a cloud solution.

Reliable system operation

The system monitoring function provided by HovalSupervisor cloud ensures reliable system operation. It detects faults immediately and forwards them to the correct recipient in line with their priority rating. This allows system operators to respond promptly and appropriately – ideally without customers noticing any effects. As a result, failure risks and costs are minimised and problems can be rectified before they have even occurred.

- **Monitoring:** Real-time monitoring and remote maintenance reduce downtimes and maintenance costs while also extending the life of the system.
- **Alarm management:** In the event of faults, instant notifications drastically reduce failure risks and costs.
 - **Targeted problem detection:** The system prevents unnecessary alarms and improves efficiency through the precise detection of critical faults.
 - **Cost efficiency:** HovalSupervisor cloud reduces on-call service costs by only triggering alarm messages in the event of major faults.
 - **Customer-specific optimisation:** Ongoing adjustments based on feedback and analyses from our customers ensure continual improvement of the alarm management system

Compared to equipment without a management system, HovalSupervisor cloud reduces the costs that occur in the event of faults by up to 90 per cent.

Data security

- Encryption of all sensitive customer data
- Encrypted storage of all data
- Encrypted access to the system with user authentication
- Activities are logged for traceability (reading, saving, modifying)
- Data centres exclusively in the EU, protected and redundant
- TÜV certification according to IEC-62443-4-2/1 in progress

Reliability ensured with first-class service

As a dependable partner with comprehensive availability, Hoval is here to support you. Our extensive service network will provide rapid assistance in the event of faults and keep your systems up and running on a long-term basis.

Comprehensive maintenance contracts: Hoval maintenance contracts include regular maintenance, fault repair and spare parts to maximise operational reliability and efficiency.

For customers with an appropriate maintenance contract, we offer round-the-clock support – 24 hours a day, 365 days a year – to ensure that your systems and equipment keep working reliably and as effectively as possible.

up to **90%**
reduction in troubleshooting expenses

Hoval quality.
You can count on us.

Hoval is one of the leading international companies for heating and indoor climate solutions. Drawing on more than 75 years of experience and benefiting from a close-knit team culture, the Hoval Group delivers exciting solutions and develops technically superior products. This leadership role requires a sense of responsibility for energy and the environment, which is expressed in an intelligent combination of different heating technologies and customised indoor climate solutions.

Hoval also provides personal consultations and comprehensive customer service. With around 2500 employees in 15 companies around the world, Hoval sees itself not as a conglomerate, but as a large family that thinks and acts globally.

Hoval heating and indoor climate solutions are currently exported to more than 50 countries.

Responsibility for energy and environment

Your Hoval partner

Liechtenstein

Hoval Aktiengesellschaft
9490 Vaduz
+423 399 24 00
hoval.com

United Kingdom

Hoval Ltd.
Newark Notts. NG 24 1JN
+44 1636 672 711
hoval.co.uk