

Intelligent building control  
for all requirements

Smart building management  
in private residential buildings  
Highly efficient facility  
management in commercial  
properties

# GIRA

## Gira HomeServer 2, Gira FacilityServer

### Intelligent building management via KNX/EIB and TCP/IP

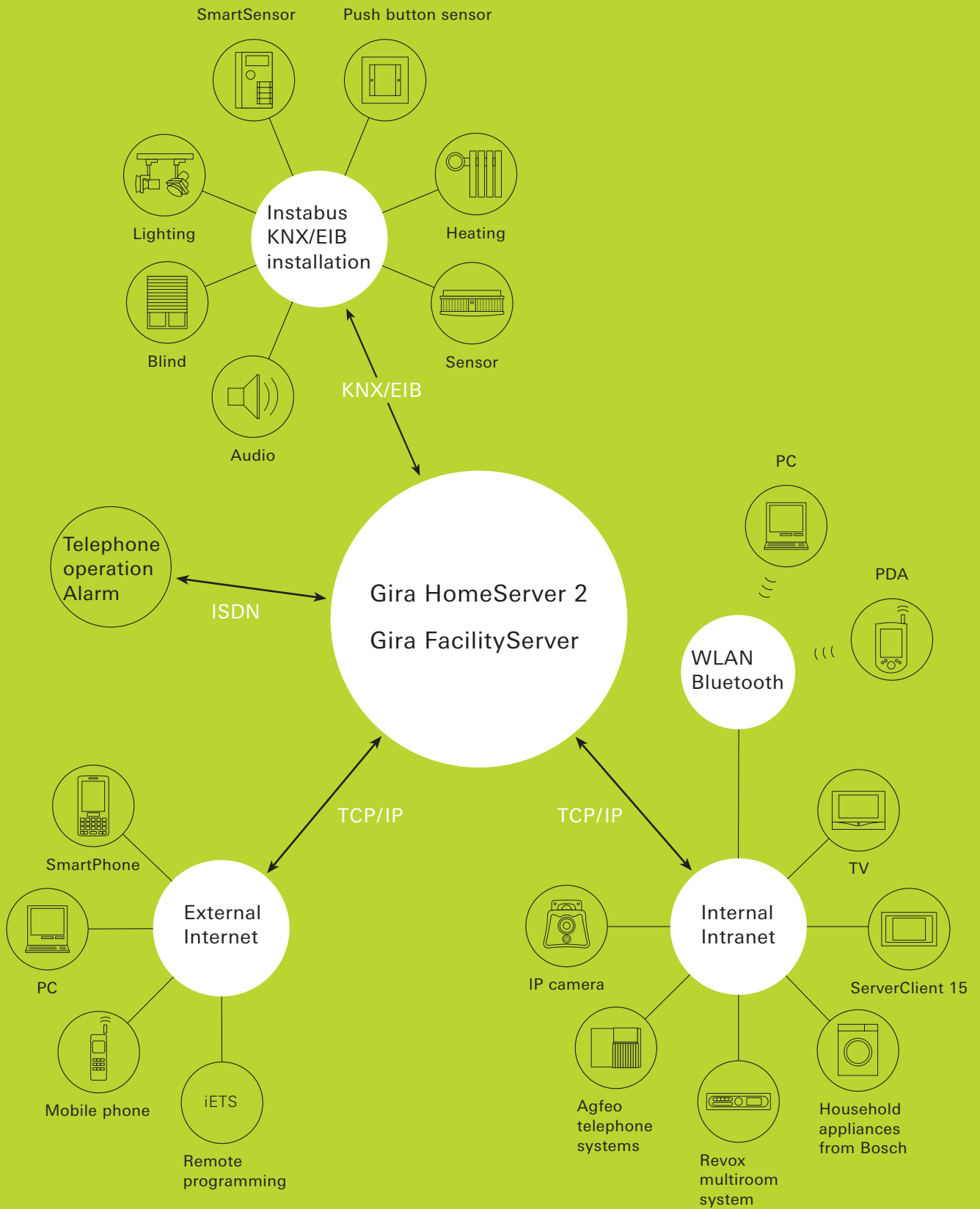


## Intelligent networking for intelligent building management

Intelligent building management ensures more comfort, more economy and more security both in the private and commercial fields. With the Gira HomeServer 2 and the Gira FacilityServer the entire spectrum of building technology can be regulated and controlled and a complex system and process monitoring set up. On the basis of two established standards the Gira servers connect the Instabus KNX/EIB system with the Intranet and Internet via TCP/IP. Thus monitoring and operation of the building technology is possible at any time and everywhere from internally and externally – just like teleservicing and remote configuration of the system. This offers the users more flexibility, more mobility and more security.

### Advantages:

- > Function-overlapping monitoring and control of the entire connected building technology
- > System and process monitoring
- > Independent controlling through several users
- > Teleservice and remote configuration of the Instabus KNX/EIB system parallel to running operation



## In private areas: the Gira HomeServer 2

The Gira HomeServer 2 is the on-board computer for the house. It functions as a gateway for the entire Instabus KNX/EIB installation in a building and is absolutely essential for the networking of modern buildings and their technical equipment internally and with the world. It enables operation of the Instabus KNX/EIB functions via the most modern communication media. In addition to a PC, access is also possible with other Internet-capable devices –either directly via the LAN network, an in-house radio network or via the Internet. Thus the Instabus KNX/EIB functions can be controlled and regulated anytime, anywhere:

### Advantages:

- > Controlling from inside and outside the building
- > Maximum mobility and flexibility
- > Controlling of the connected building functions via standard software such as Internet browsers
- > Simple, intuitive operation by means of graphics visualisation or simple menu control
- > Extension and updating through software updates

### Access and control via the Instabus KNX/EIB system

The Gira SmartTerminal or the ServerClient 15 can be used as comfortable operating devices for the Gira HomeServer 2. Placed at a central location in the building, it functions as the control, signalling and regulating unit for the complete KNX/EIB installation in a building as well as the terminal for receiving e-mails and accessing useful German-language on-line services, such as weather forecasts and current news.

The Gira SmartSensor furthermore presents itself as a multi-room regulating and control unit for the Instabus KNX/EIB system. The Gira push button sensors are the most compact devices for controlling the bus system at individual operating points.

### Access and control via TCP/IP and Internet

The Internet gateway homeserver.gira.de can be used to access one's Instabus KNX/EIB installation worldwide and without any additional software being required.

This gateway allows the user comfortable access to his building. It is thus possible to access Gira HomeServer 2 units that go on-line after a user request.

Access is possible, for example, via a PC/laptop, mobile Internet terminals (PDA, Webpad), Web-TV and any other device that has an Internet browser. The images provided by the IP cameras connected to the network can also be viewed.

### Protection against hacking from the Web

Thanks to its software architecture the Gira HomeServer 2 is protected excellently against hacking from the Internet. Further information can be found under [www.gira.de/homeserver](http://www.gira.de/homeserver)

### Control via mobile phone

The user can be informed on technical malfunctions, measured values and states or the respective system by e-mail or SMS.

Visualisation on the SmartPhone is carried out via a menu structure and depends on the user groups.

After identification the menu in the mobile phone can be used, for example, to switch all the linked electric devices and lights on or off, read and modify the respective room temperature, view lists with the malfunctions which have occurred or manage light scenes and time delay switches.

When outside the building the Instabus functions can be operated by means of mobile phone and GPRS/UMTS. Within the building the same operation is also possible via Bluetooth or WLAN without incurring on-line costs.

### Identification

The highest degree of security is provided by the checking of the phone number, of the user name and the PIN query. Various security levels can be configured user-specifically to various requirements depending on the access environment, for example, Internet gateway (external) or the Intranet (internal).



Gira HomeServer 2

## Comfortable@home

Intelligent building management makes living even more pleasant and comfortable. For the Gira Instabus KNX/EIB system makes it possible to control various functions, such as lights, blinds, ventilation, heating and household appliances very simply from a central position, for example via the Gira SmartTerminal or the ServerClient 15. The building control system can thus be adapted completely individually to the needs of the user and can be reprogrammed at any time. For example, scenarios can be combined with suitable music and repeating sequences, such as blind control or watering the garden can be controlled automatically at the desired times or dependent on the weather conditions.

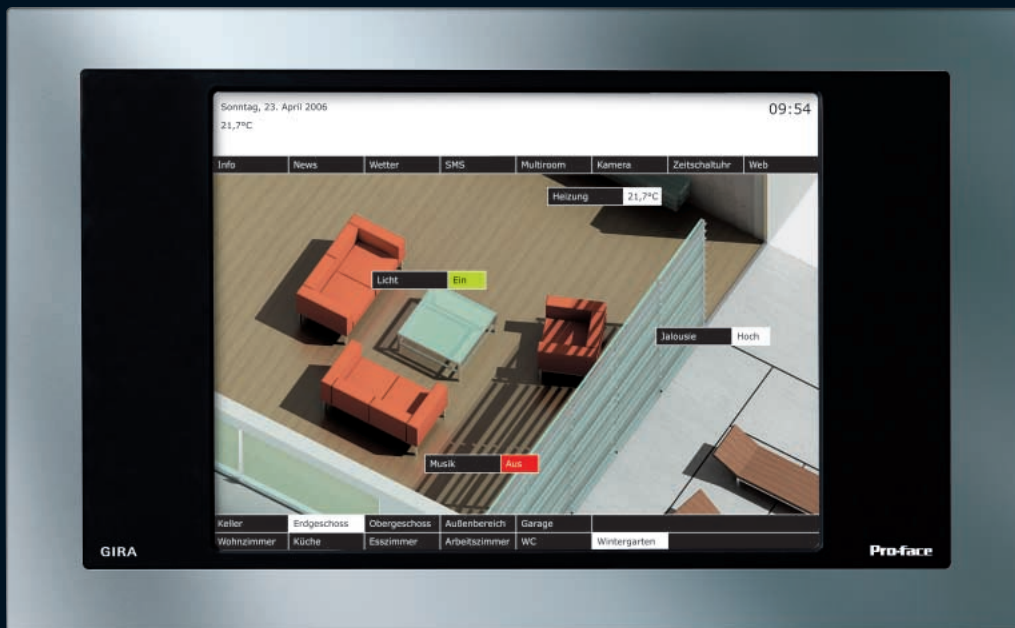
- 01 Gira HomeServer 2
- 02 Gira SmartTerminal with Update 2.0 available starting 09/2006



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Gira/Pro-face ServerClient 15  
Touch screen in cooperation  
with the Pro-face company

>> **Central control of all house components** With the Gira Instabus KNX/EIB system the entire house technology with the functions such as lights, blinds, heating, ventilation and security equipment, can be interconnected and operated. The states of the connected devices and functions can be monitored and modified via the PC, the PDA, the ServerClient 15 or at the Web-TV from a central position.

>> **Room for room the right cosy temperature** Time-controlled heating control ensures warmth on each room –exactly when it is needed. The bathroom is, for example, heated early in the morning and the living room is heated to the individual cosy temperature in the evening. If the sensors signal strong sunshine in the winter, the heating in the rooms is reduced and the sun's energy is used –thus saving energy.

>> **Multimedia entertainment in every room** With the Revox multiroom system or the Gira EIB audio system music can be distributed and controlled in the entire house. Both systems can be included in the KNX/EIB installation by connecting them with the Gira HomeServer 2 and then also be monitored and controlled via PC, PDA or the ServerClient 15. This makes it possible to bind the music control without problems into room scenes.

>> **Creating and calling up individual scenes** Lighting, blinds and music control can be linked into complex scenarios. They can be combined individually and also modified at any time. Such a scene can be started, for example, when the TV is switched on: Depending on the time-of-day shading in realised by moving the blinds or shutters, the lighting is dimmed and the system is set to a specific volume.

>> **The personal greeting scene** If the door locking system or the Gira Keyless In products are included, the Gira HomeServer 2 recognises that an occupant has just come home. When the front door is opened, for example, the light scene preferred by the person is activated in the hallway and living room, the person's favourite music is started, the bathroom is heated and the Gira SmartTerminal displays the current e-mails –depending on the time.

>> **Seeing from the sofa who has been there today** When the bell rings while no one is at home, the Gira HomeServer 2 can record and archive the camera pictures from the door station in connection with the TV gateway from the Gira door communication system and an IP converter. Once you have returned home, you can, for example, call up the archived pictures via the Internet-capable Web-TV and look who wanted to leave something or visit.

>> **Automatic watering of the garden** The Gira HomeServer 2 decides automatically whether the garden has to be watered on the basis of the current weather data from the EIB weather station, of the weather forecasts from the Internet and depending on the measured values for the soil moisture. It then transmits control commands to the corresponding actuator equipment and activates the lawn sprinkler or the corresponding watering systems.

- 1 Gira HomeServer 2
- 2 Gira SmartTerminal
- 3 Blinds
- 4 Heating
- 5 Lighting
- 6 Home Entertainment with Web-TV and multiroom system
- 7 Mobile Internet terminal for controlling the building via WLAN
- 8 Door communication system with camera
- 9 Sensors for detecting weather data such as temperature, rain, wind



## Secure@home

A secure home means more security and more living quality since it provides a feeling of safety and lets its occupants sleep peacefully. Intelligent building technology allows a home to be made secure all round. With the Gira HomeServer 2 it is possible to interconnect alarm systems, movement detectors, smoke detectors, glass-breakage and wind sensors as well as many security-relevant devices intelligently. If the system registers irregularities or dangers, it informs the occupants and automatically initiates countermeasures. It, for example, switches defective devices off, retracts the awning during a storm or clears the escape route in case of fire.

- 01 Gira HomeServer 2
- 02 Gira central circuit breaker
- 03 Gira info display 2
- 04 Gira Tectiv 220°



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04



2-gang combination info display 2, colour aluminium/  
push button sensor 2 as a panic switch, transparent white  
Gira Esprit, black glass



>> **Security through camera monitoring** One or more IP cameras with which the house and the surrounding area can be monitored effectively can be connected to the Gira HomeServer 2 via the network. If the detectors and sensors register movements during the night or when the occupants are absent, the light is switched on in this area and the pictures of the camera are recorded. Questionable characters thus do not remain unnoticed. The pictures can then, for example, be followed on the ServerClient 15 or on the TV in the bedroom.

>> **Panic function** If sufficient noises are heard or if the sensors show movement in the garden at night, the panic switch can be pressed rapidly. The circuit is implemented via the Instabus KNX/EIB system and can be set up directly to a push button sensor directly next to the bed. A short push of the button is sufficient to switch on all the lighting in and around the house immediately and to start recording of the camera pictures. The sudden brightness has a deterrent effect and usually puts burglars to flight.

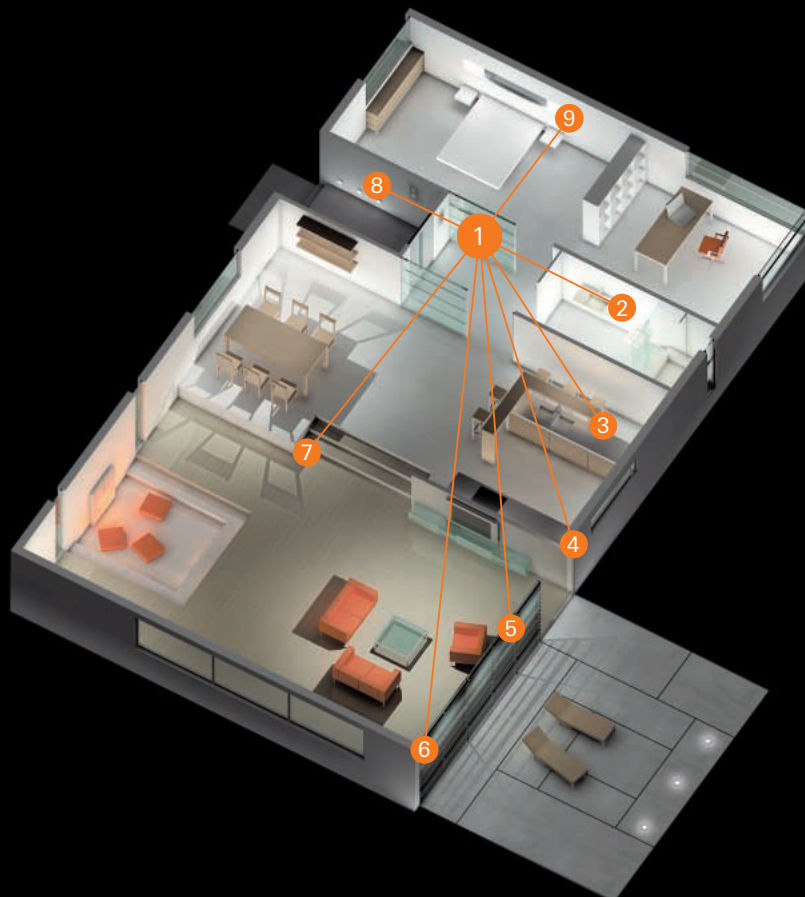
>> **Security in case of technical defects** Sensors and technical sensors have important monitoring functions and monitor, for example stove, refrigerator, dishwasher, deep-freezer or washing machine from the serve@Home system of the household appliances manufacturer Robert Bosch. If the washing machine leaks, if the door of the deep-freezer is open or if the heating system fails, the Gira HomeServer 2 immediately sends a fault message, for example, to the PC, the Gira info display 2 or the Agfeo telephone system. This allows the occupants to react to the problem before greater damage occurs.

>> **Warding off of dangers through smoke and fire** If the Gira smoke detector registers dangerous smoke development or fire, the Gira HomeServer 2 becomes active immediately. It automatically takes the first countermeasures and is a decisive help in fleeing, since every second counts in case of danger. The Gira HomeServer 2 raises the blinds and shutters automatically, switches the light in the escape route on, unlocks the front door and ensures ventilation. If the occupant is absent, it also alarms the occupant through a call or SMS.

>> **Storm safety** In case of dangerously high wind speeds the wind sensors output a message to the Gira HomeServer 2 that in turn ensures that the house is in a state to withstand a storm. It, for example, then automatically retracts the awnings raises the blinds, closes motor-operated windows, skylights or open garage doors. The shutters on the side of the house facing the wind are lowered.

>> **House empty – everything off** When the front door is locked once, the system is informed that the occupants are out of the house. The Gira HomeServer 2 then ensures that the lights are switched off in the entire house, special current circuits, for example for the iron, are switched off and the hot-plates are off. Locking the door twice signals a longer absence. The system then additionally switches the heating and ventilation to stand-by, closes all the motor-operated windows and starts the occupied-home simulation.

- 1 Gira HomeServer 2
- 2 Water detector
- 3 Networked household appliances such as deep-freezer, refrigerator or stove
- 4 Movement detector
- 5 Door and window contacts, glass breakage detectors
- 6 IP cameras
- 7 Smoke detectors
- 8 Door locking system with central-off function
- 9 Panic switch and info display 2



## Economical@home

Intelligent building technology helps in saving. The Gira HomeServer 2 allows for an energy management system that is tailored exactly to the requirements of the occupants. Thus, it is possible to create special time profiles for each individual room. These control where and how long heating and ventilation are to run in the house. The system registers that no one is at home, the entire building is set into an economical stand-by mode. In addition, all the operating and consumption data can be recorded, displayed and analysed in order to realise efficient energy management.

- 01 Gira HomeServer 2
- 02 Gira push button sensor 2plus 2-gang
- 03 Gira automatic control switch
- 04 Gira presence detector



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Gira SmartSensor, anthracite

>> **Energy management** The Gira HomeServer 2 provides the energy for the various functions as required. If all the occupants are out of the house, the building is set into stand-by mode in order to avoid unnecessary energy consumption. The heating and ventilation are reduced, devices and lights that may have been left on by mistake are turned off. Specified time profiles are used to make the energy available again exactly when it is needed. For example, certain rooms are heated up half an hour before the occupants return.

>> **Individual room regulation of heating and ventilation** With the Gira HomeServer 2 a separate profile can be created for each individual room with the times in which the room is used and should thus be heated or ventilated, for example in the morning and evening in the bathroom. Living areas are heated up during the working week half an hour before the occupants return from work and heated continuously during the weekend. The temperature can furthermore be regulated individually at any time using the Gira SmartSensor or the Gira push button sensor 2plus. This results in a temperature regulating system that fits the requirements exactly while saving energy. Meaning that the heating and ventilation system never run unnecessarily.

>> **Window open, heating off** The system registers by means of door and window contacts when a door or window is opened. After a period that can be set the system then automatically turns down the radiator valve in the corresponding room by means of the Instabus actuator drive. The heating is not turned up again until all the doors and windows in the room have been closed again. This avoids unnecessary heating and saves energy costs.

>> **Requirement-specific control of the supply temperature** On the basis of the setpoints of the various radiator valves in a building the system recognises whether the supply temperature set for the heating is too high. It then correspondingly corrects the supply temperature downwards automatically. This guarantees optimum energy utilisation and avoids unnecessary costs.

>> **Recording and evaluating consumption data** The operating and consumption data, for example for electricity, water, heating oil and gas are recorded and archived continuously by the Gira HomeServer 2. They can then be displayed very simply in a clearly structured graphical form and viewed on the PC. The development during the entire year can thus be documented and an overview obtained at any time. It is easy to determine the average consumption for a specific period and to recognise deviations and trends rapidly. This helps to optimise the energy management.

- 1 Gira HomeServer 2
- 2 Presence detector
- 3 Consumption data meters for electricity, water, gas
- 4 Room temperature controller
- 5 Hot water heating
- 6 Automatic control switch
- 7 Gira SmartSensor
- 8 Radiator valve drive
- 9 Door and window contacts



## Away@home

Everything that is possible within a building is also possible from the outside. For the entire building can also be controlled via the Internet by means of the Gira HomeServer 2. The state of the house technology can be monitored and operated by using a laptop or other Internet-compatible devices such as SmartPhone or PDA. Then you can quickly check, for example, whether all the devices are switched off or whether you have forgotten to activate the alarm system. Subsequent changing is possible without any difficulty. And if there is any danger at the house, the system alarms the occupants by e-mail, call or SMS.

- 01 Gira HomeServer 2
- 02 Visualisation on a mobile Internet terminal/PDA
- 03 Visualisation on a laptop or PC



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Visualisation on a SmartPhone

>> **Intelligent building management via World-Wide-Web** The Gira HomeServer 2 establishes the connection to the house technology via the Internet using TCP/IP. This means that remote monitoring, checking and controlling of the building technology is possible at any time and anywhere. Whether from the office, from the Internet cafe or while on holiday: The state of the entire house technology can be checked and, if necessary also changed by means of the PC or other Internet-compatible devices such as a laptop, SmartPhone or PDA.

>> **Eliminating risks while away** Who hasn't been in this situation: You have hardly left home when you start wondering whether you switched off the stove or iron and whether the alarm system has been activated. This is no longer a problem when the Gira HomeServer 2 is used. By using the SmartPhone or the PDA the state of the house technology can be checked quickly and the devices simply switched off, if necessary. The alarm system can also be activated later on.

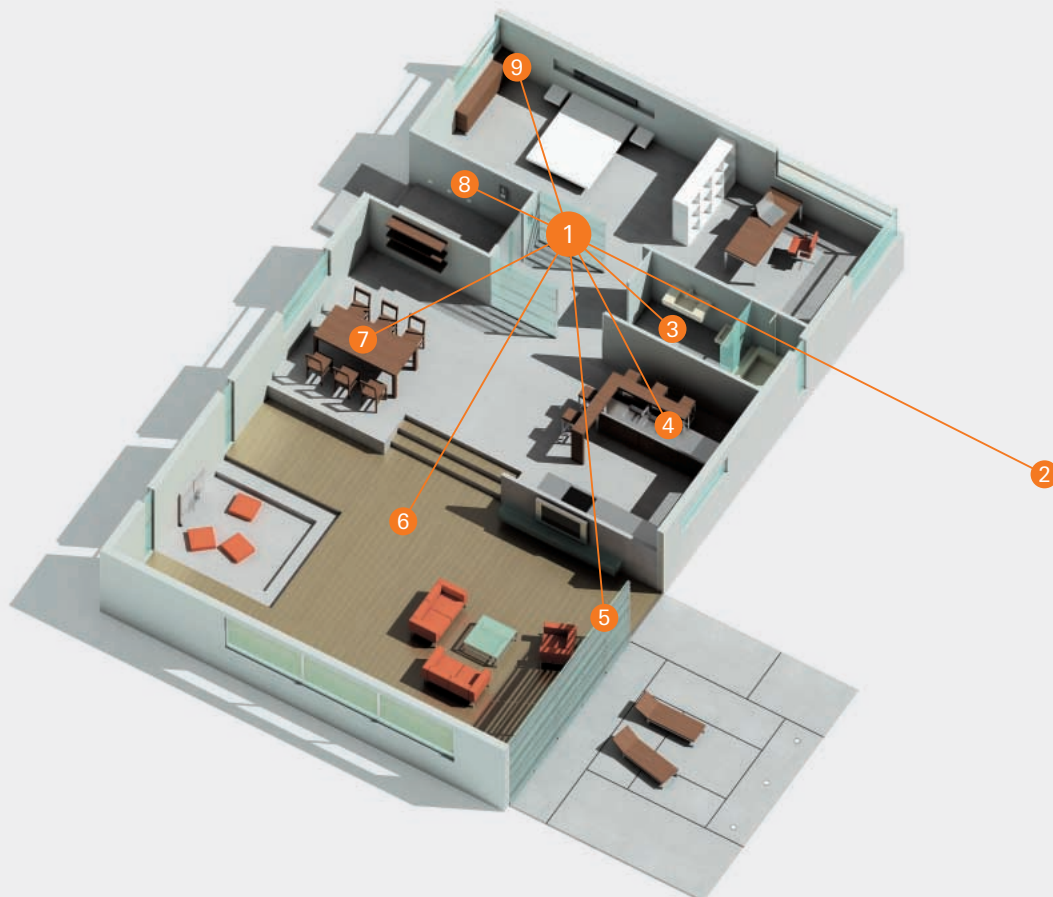
>> **Recognising dangers and triggering an alarm** If sensors and detectors, such as glass-breakage sensors, smoke detectors or technical sensors register a danger, the system immediately triggers an alarm and informs the home owner by e-mail, call or SMS, who can take countermeasures immediately. Similarly the system can, for example, recognise a burglary attempt through glass-breakage sensor and movement detectors and inform the monitoring service by itself.

>> **Door communication and access control by mobile phone** If the doorbell rings and no one is at home, the Gira TV-gateway transmits the signal to the SmartPhone or to the mobile phone of the occupants. They can then speak to the person at the front door and, in combination with the Gira HomeServer 2, view the camera pictures of the door station on the mobile phone as an additional security measure, in order to open the door, if appropriate. Practical, for example, if another occupant has forgotten his or her key or if a service person is to be let into the house.

>> **Carefree holidays** During holiday periods the Gira HomeServer 2 organises a complex occupied-home simulation. After the house has been left, the system replays the recorded processes automatically, for example of the last seven days. For it has noted when and where lights were switched, the blinds raised or lowered or music was played. This gives the appearance of someone being home, even if that's not the case for a longer period.

>> **Remote programming by an expert** The Gira HomeServer 2 and the Instabus KNX/EIB system are programmed by a master electrician. In order to implement minor modifications rapidly, he can also access the Gira HomeServer 2 of the customer remotely, for example from his office, via the Internet. A fully implemented iETS server is available to him on the Gira HomeServer 2. This means that the entire Instabus KNX/EIB system can be programmed via the ETS while the Gira HomeServer 2 continues to run in normal mode. This remote programming allows rapid uncomplicated implementation of the customer wishes and avoids unnecessary travel expenses.

- 1 Gira HomeServer 2
- 2 Internet-compatible operating devices, such as SmartPhone, PC, laptop or MDA
- 3 Technical detector
- 4 Switchable SCHUKO socket outlets, household appliances from Bosch (serve@Home system)
- 5 Door and window contacts, glass breakage and movement detectors
- 6 Fire and smoke detectors
- 7 Scene control with light, Venetian blind, heating and music
- 8 Door communication system with camera
- 9 Room temperature controller



### For commercial properties: the Gira FacilityServer

The Gira FacilityServer is specially designed for the stringent demands of the commercial sector. It allows facilities and building functions to be networked intelligently with each other and the entire Instabus KNX/EIB installation to be monitored, controlled and programmed centrally from the PC. Access and monitoring of the building and facility technology from the outside is also possible without any problem by connecting the Gira FacilityServer to the Internet. In addition, the Gira FacilityServer serves as a data server for higher-level facility management systems, to which it provides stored consumption and operating data for evaluation. The Gira FacilityServer is available starting 09/2006.

### Advantages:

- > Highly efficient facility management with the Instabus KNX/EIB system
- > Interconnection of the facilities and functions via the local network or via the Internet
- > Configuration is carried out via the Gira FacilityServer Expert commissioning software
- > The connected functions are operated via standard software such as Internet browsers or additional clients
- > Visualisation of the building and function structure
- > Investment protection through extensions and software updates

### Tasks and fields of use

The Gira FacilityServer offers the complete functional range of the Gira HomeServer 2 and is equipped with considerably more memory for its use in the commercial field. This ensures that considerably larger amounts of data can be stored and more complex extensive visualisations created. In addition it is possible to interconnect several Gira FacilityServer units, so that buildings that are separated from each other can be linked to each other without problems. This means that local and higher-level applications can be coordinated in a demanding fashion.

### Use in a 19" rack

The Gira FacilityServer can be used as a stand-alone device, but is also suitable for installation in a 19" rack. To this purpose the scope of delivery includes a 19" insert with an aluminium plate.

### System security against attacks from the network

Thanks to its software architecture the Gira FacilityServer is protected excellently against hacking from the Internet. Further information can be found under [www.gira.com/facilityserver](http://www.gira.com/facilityserver)



Gira FacilityServer with 19" insert

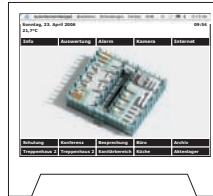
## Intelligent@work

The Gira FacilityServer takes over the monitoring and control of the entire Instabus installation in commercial facilities. It interconnects the various functions and facilities, combines their functions and stores all the consumption and operating data. Repeating sequences can be automated and processes optimised. The intelligent control of the Gira FacilityServer guarantees optimum working conditions at all times and helps to relieve the personnel. However, the state of the building technology can also be viewed comfortably from the PC workplace either as a whole or for a specific floor or an open-plan office and changed directly.

- 01 Gira FacilityServer
- 02 Visualisation and operation via touch screen, laptop or PC



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>> **Central visualisation and control at the PC** The Gira FacilityServer makes it possible to visualise the entire building and function structure at the PC clearly. The states of all the devices connected to the Instabus KNX/EIB system can be queried and individual functions and settings can be changed individually.

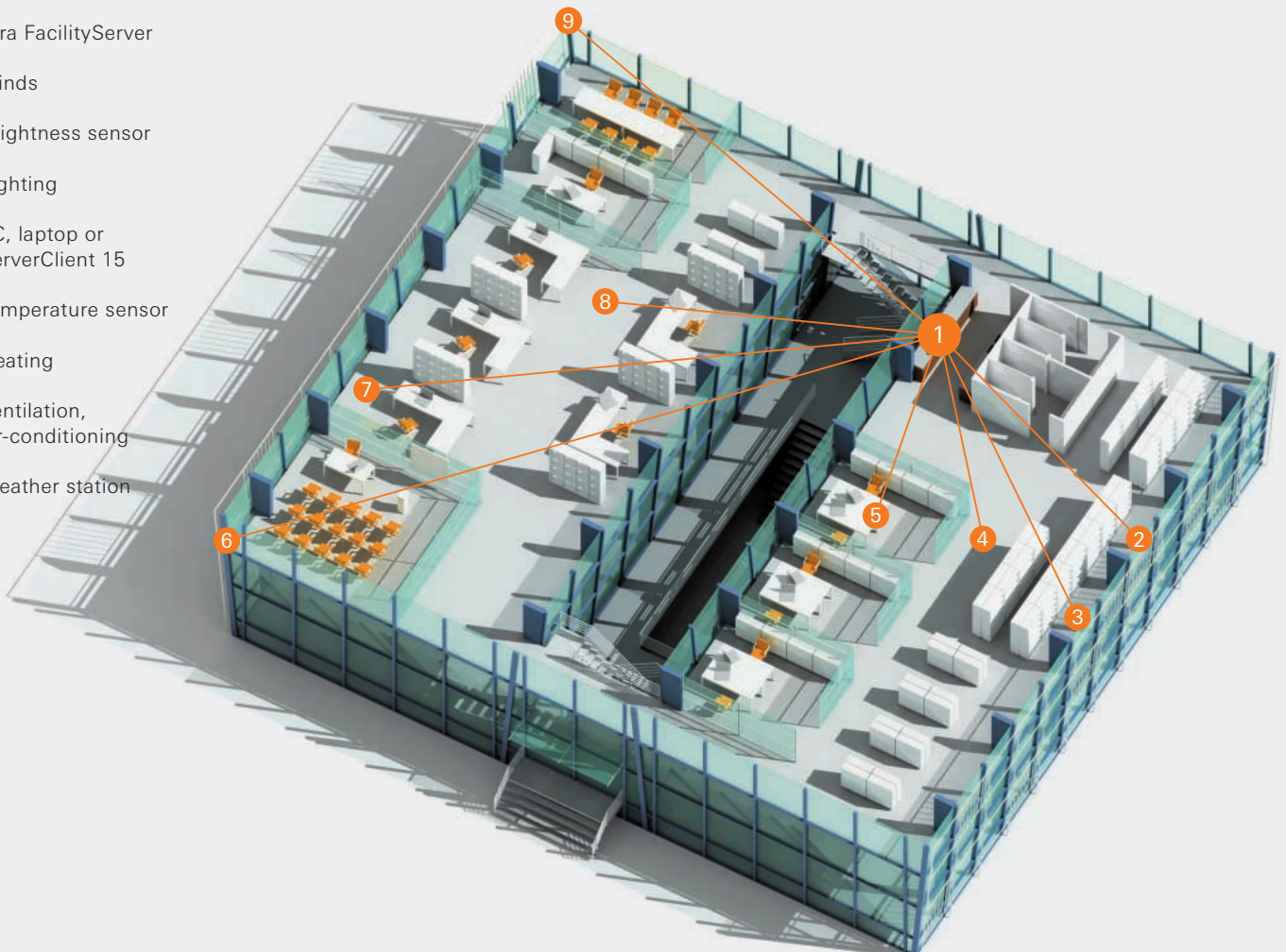
>> **Individual scene management in every room** An individual scene management can be set up separately for each room with the Gira FacilityServer. For example a scene for a lecture with beamer would be appropriate for the conference room. It can then be activated at the press of a button, for example on the Gira push button sensor or the Gira SmartSensor. The blinds are then lowered, the heating or ventilation activated depending on the weather, the screen lowered and the beamer switched on automatically.

>> **Remote control and monitoring** The Gira FacilityServer establishes the connection via the Internet using TCP/IP. This allows the entire building technology to also be monitored and controlled from the outside via PC, laptop, SmartPhone or mobile phone. If the alarm system is triggered or if other dangers exist at the building, the system automatically sends a warning by call, SMS or e-mail to the caretaker or the monitoring service. The state of the facility can then be checked immediately and the required countermeasures initiated.

>> **Automation of sequences through logical links** For the simple automation of recurring sequences the Gira FacilityServer offers the possibility of linking using special logic blocks. This allows actions to be set up and combined depending on certain events and measured values. Thus, for example, the system automatically ensures specific building shading after the evaluation of weather and sun position data. This creates not only optimum light conditions, but also prevents the building from heating up too strongly.

>> **Gateway to other function systems** The Gira FacilityServer can furthermore be used as a powerful gateway to other facility systems. The consumption and operating data that are recorded, stored and documented by the various functions and the individual connected devices, can be made available to other systems for further evaluation and analysis.

- 1 Gira FacilityServer
- 2 Blinds
- 3 Brightness sensor
- 4 Lighting
- 5 PC, laptop or ServerClient 15
- 6 Temperature sensor
- 7 Heating
- 8 Ventilation, air-conditioning
- 9 Weather station



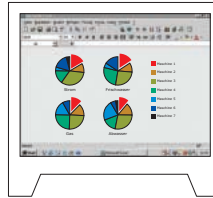
## Efficient@work

An intelligent energy management is of particular importance in the commercial field, since it allows capacities to be saved and operating costs to be reduced. The Gira FacilityServer allows requirement-oriented control of heating, cooling and lighting that can be defined individually for each room via time and use profiles. This ensures that energy is only consumed when it is really required, thus not only reducing the consumption, but also ensuring optimum operating conditions and time saving through automated sequences. The Gira FacilityServer can also monitor complex technical facilities and contribute decisively to process optimisation through economy. In the process it documents all the consumption and operating data, thus providing extensive material for further optimisation of the energy management.

- 01 Gira FacilityServer
- 02 Visualisation and graphical display of the determined operating and consumption data for example in spreadsheet programs



01



02



>> **Automatic regulation of heating, cooling and lighting** The Gira FacilityServer allows requirement-specific controlling of the heating, cooling and lighting to be set for the entire object and thus to avoid unnecessary energy consumption. In combination with an access control system the Gira FacilityServer recognises, for example, which person has just arrived and correspondingly switches the heating, ventilation and lighting in the corresponding office. When the employee leaves the building, all the consumers in the respective office are reduced. Rooms that are used seldom can be equipped with presence detectors or automatic control switches. They only leave the lighting, the ventilation or other functions switched on as long as they are really needed.

>> **Efficient time management** In order to achieve an economical energy supply, a time profile that describes the requirement-specific times of use can be assigned to each room and each facility. On the basis of these data the system switches on the heating or the air conditioning at the respective time and makes energy available to the facility. Practical lead times are taken into consideration. When the time of use ends, the lighting and the heating are switched off and the facilities are decreased.

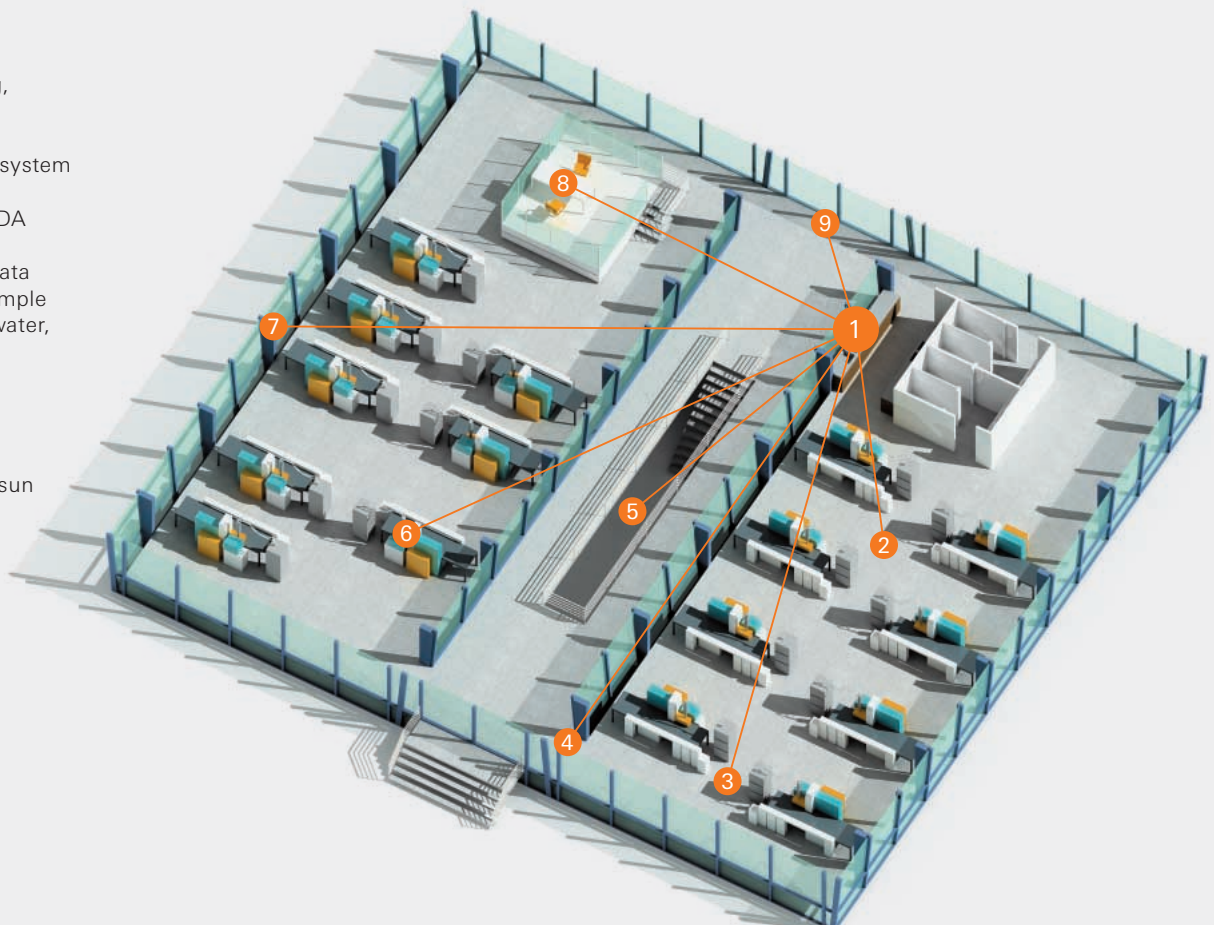
>> **Intelligent saving of energy** The Gira FacilityServer is capable of influencing the energy utilisation actively by linking determined measured values with specific events. For example, it can initiate direct cooling down of the building at night in summer after having compared in the indoor and outdoor temperatures. This avoids additional running of the air-conditioning in the next morning, thus helping to reduce the energy costs.

>> **Effectiveness through more flexibility** The possibility of controlling and monitoring the entire system remotely means that the responsible staff no longer has to sit at a specific workplace in front of the screen, but can carry out additional tasks flexibly. Warnings or fault messages are then passed on automatically to the employee on his or her SmartPhone or PDA via WLAN.

>> **Recording and analysing consumption data** The Gira FacilityServer records and stores all the consumption and operating data of the facilities and consumers connected to the system for all the functions. It can pre-sort the data and combine them, for example for a specific period or a building section. The data can be viewed and analysed on a PC in a well-structured visualisation in order to optimise energy management even further.

>> **Process optimisation** The Gira FacilityServer is excellently suitable for process optimisation of larger facilities. In this case it uses technical detectors and sensors to monitor all the automated sequences. In the process it can recognise faults and issue a warning in case of increased energy consumption due to leakages or other defects. In the long term these data can be used for process optimisation. This helps to save operating costs.

- 1 Gira FacilityServer
- 2 Lighting
- 3 Heating, air-conditioning, ventilation
- 4 Access control system
- 5 SmartPhone, PDA
- 6 Consumption data meters, for example for electricity, water, heating oil
- 7 Sensors for temperature, brightness, position of the sun
- 8 PC, laptop or ServerClient 15
- 9 WLAN access point



## Secure@work

Security is extraordinarily important in the commercial field, because high-quality equipment and large facilities have to be protected and business secrets kept. The Gira FacilityServer ensures security on the highest level. Detectors and sensors as well as IP cameras can be interconnected through it. They monitor the entire building on the inside and outside as well as the technical facilities. If they register an irregularity or a danger, the Gira FacilityServer then triggers alarm and takes the first countermeasures. In the case of leakage, overheating or violation of the limits, a detailed fault message is displayed immediately, for example on the PC monitor. The system thus offers the possibility to react rapidly to problems before greater damage occurs.

- 01 Gira FacilityServer
- 02 Fault message and camera picture of the defective facility directly on the monitor



01



02



>> **Securing a building against external dangers** If no-one is in the company at night or on a holiday, detectors, sensors and IP cameras monitor the building. If the IP cameras, for example of the company Mobotix, register changes within a specific picture area, such as unauthorised persons on the grounds, they send a message to the Gira FacilityServer. This then switches on the outside lighting, if appropriate, records the camera pictures and alarms the monitoring service. The service can then view these pictures via a SmartPhone or a PDA and get a first impression.

>> **Camera-supported process and facility monitoring** Sensitive and vulnerable areas can be monitored directly by means of IP cameras. The cameras are connected to the system via the Gira FacilityServer. If a fault occurs, the monitor displays not only a fault message, but also directly the camera picture of the respective facility area. If, for example, a line leaks, the scope of the damage can already be recognised on the monitor.

>> **Recording and passing on of fault messages** In order to prevent a larger fault or even a failure, it is important that corresponding sensors, for example for temperature, humidity, pressure or fill level, monitor the technical facilities and warn in time if certain limits are exceeded. If, for example, the air conditioning fails in a control cabinet and the temperature rises too high, the technical management receives a warning in good time and can take corresponding precautionary measures.

>> **Warding of dangers by means of specific countermeasures** If, for example, facilities fail or another dangerous fault occurs at night when no-one is present, the Gira FacilityServer automatically informs the monitoring service by SMS, e-mail or by a phone call. Specific countermeasures, such as switching off overheated machines and devices, can also be initiated automatically.

>> **Including systems for safety lighting** The escape route lighting and escape route guidance systems, for example of the company Inotec, can be linked to the system. This allows additional information from these systems to be passed on to the Gira FacilityServer. Faults such as light or battery failures can thus be passed on directly to the technical personnel, for example onto a mobile phone.

1 Gira FacilityServer

2 Door and window contacts, glass breakage detectors

3 Water detectors

4 Smoke detectors

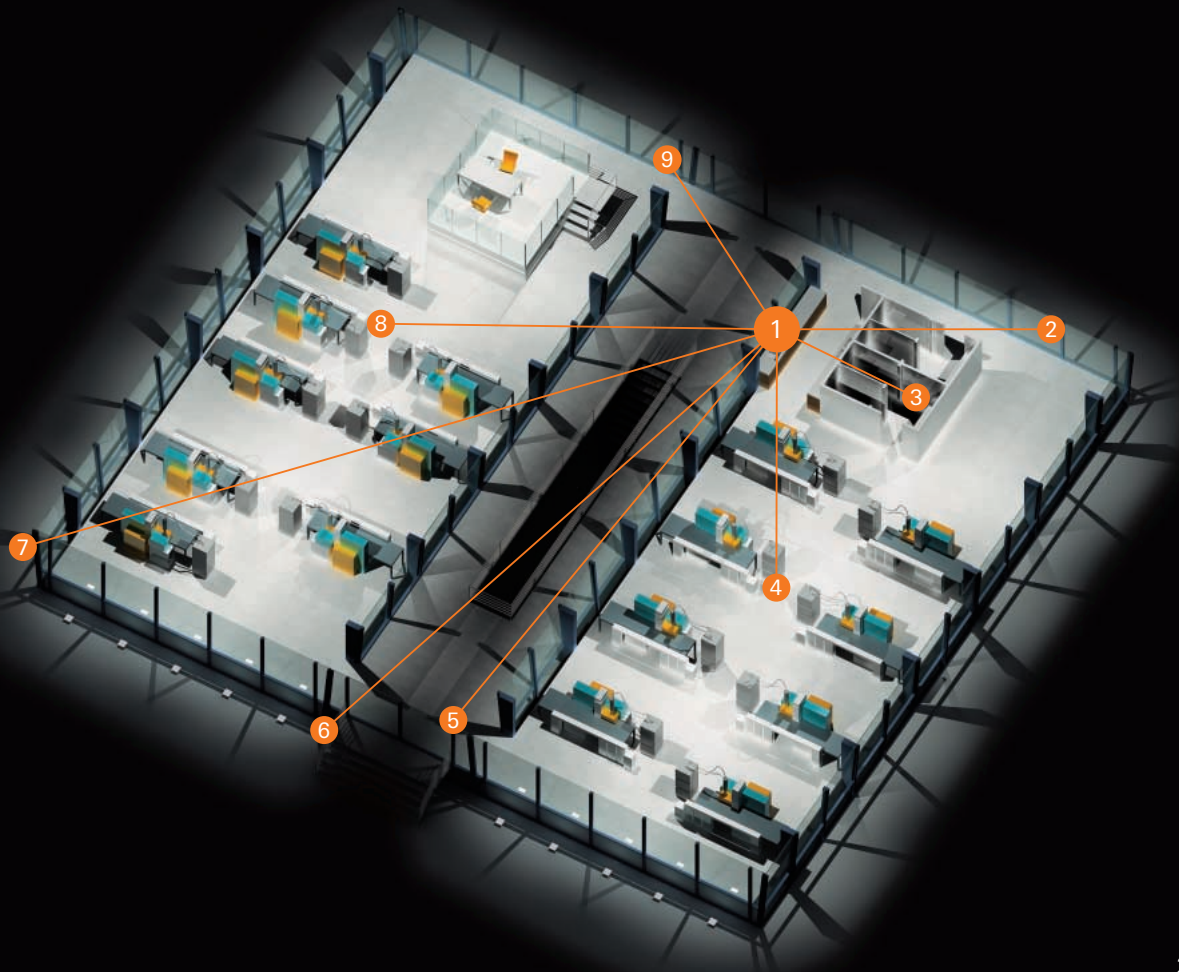
5 Movement detectors and sensors

6 Access control through Gira Keyless In

7 IP cameras

8 Sensors for air quality, temperature, humidity, pressure, fill level

9 Weather station



## Technical data of Gira HomeServer 2



### Functions

- Secure access procedure: Identification via phone number, user name, IP address and PIN
- Can be updated
- Administration of 200 users, multiple login under one user name is possible
- Cyclic/triggered data recording (for example, temperature courses, elapsed-hour meters, fill levels) and graphical display
- Mathematical functions (for example, adding, subtracting, multiplying, dividing)
- Storing and calling up light scenes
- Time delay switches, week programme, public holiday calendar
- Switching via phone call
- Self-teaching occupied-home simulation
- Remote programming via network, Internet and data communication
- Sending of ASCII texts to the Gira info display 2
- IP coupling of the Gira HomeServer 2 and external products which can generate or process own IP messages for controlling
- Resistant to wear, since no moving parts such as ventilators or hard disk
- Graphics logic editor: Allows, for example, copying of module groups across projects, creating of any number of work sheets. More than 80 logic blocks

- Communication objects: Data transfer from ETS by means of OPC file. Importing and exporting of communication objects as a CSV file
- Universal time delay switch: In addition to further functions allows several switching points per clock, usage of placeholders in day, month, year as well as activating and de-activation via communication object. Including astro and random function.
- Data backup/restoring of retentive data
- 14-byte EIB texts: Evaluation through comparison with text string. Use in SMS, e-mails or status page.
- Receipt of IP messages: Specification of an address range, extraction of 14-byte EIB texts, allocation to 14-byte EIB texts
- Operation and status display via Agfeo telephone system
- Bus access also via EIBnet/IP protocol
- Evaluation of Web pages and web-based IP devices (reading/writing)
- iETS server: Remote programming of KNX/EIB systems (secure operation possible through checking of the sender IP address), enabling of the iETS function via communication object, HomeServer continues to run during programming via iETS without limitations and also continues to carry out switching actions, the process image also remains up-to-date

Further information is available in the Gira catalogue or under [www.gira.com/homeserver](http://www.gira.com/homeserver)

### Connection possibilities

- 1 serial interface
- 1 RJ 45 network connection, 10/100 Mbit Ethernet
- To the Instabus KNX/EIB system via: Bus coupler UP 2 Order No. 0645 00 Instabus data interface FT 1.2 Order No. 0504 .. Instabus RS-232 connection cable Order No. 0906 00
- ISDN modem integrated (1 x EURO-ISDN-S0 RJ45 for direct connection to the NTBA or S0 of the phone system)

### Software commissioning

- The Gira HomeServer 2 Expert for operating systems from Windows 98™ to Windows XPTM including Internet Explorer
- Inclusion of the ETS group addresses
- Inclusion of graphics programmes

### Scope of delivery

- Power supply unit with connection cable, ISDN connection cable, null modem cable
- Short instructions
- Gira HomeServer 2 Net

### Dimensions

W x H x D 295 x 64 x 273 mm



## Functions

- Extended RAM as well as extended data memory (flash memory)
- Secure access procedure: Identification via phone number, user name, IP address and PIN
- Can be updated
- Administration of 200 users, multiple login under one user name is possible
- Cyclic/triggered data recording (for example, temperature courses, elapsed-hour meters, fill levels) and graphical display
- Exporting of data or alarm records in the ExcelTM, CSV, HTML or XML file formats
- Mathematical functions (for example, adding, subtracting, multiplying, dividing)
- Storing and calling up light scenes
- Time delay switches, week programme, public holiday calendar
- Switching via phone call
- Remote programming via network, Internet and data communication
- Sending of ASCII texts to the info display 2
- IP coupling of the Gira FacilityServer and external products which can generate or process own IP messages for controlling
- Resistant to wear, since no moving parts such as ventilators or hard disk
- Graphics logic editor: Allows, for example, copying of module groups across projects, creating of any number of work sheets. More than 80 logic blocks

- Communication objects: Data transfer from ETS by means of OPC file. Importing and exporting of communication objects as a CSV file
- Universal time delay switch: In addition to further functions allows several switching points per clock, usage of placeholders in day, month, year as well as activating and de-activation via communication object. Including astro and random function.
- Data backup/restoring of retentive data
- 14-byte EIB texts: Evaluation through comparison with text string. Use in SMS, e-mails or status page.
- Receipt of IP messages: Specification of an address range, extraction of 14-byte EIB texts, allocation to 14-byte EIB texts
- SNMP: Reading out of numerical and 14-byte EIB texts, setting of numerical and integer values as well as texts, sending of SNMP traps via HomeServer command and optional ColdStart trap when starting the HomeServer 2
- Operation and status display via Agfeo telephone system
- Bus access also via EIBnet/IP protocol
- Evaluation of Web pages and web-based IP devices (reading/writing)
- iETS server: Remote programming of KNX/EIB systems (secure operation possible through checking of the sender IP address), enabling of the iETS function via communication object, Gira FacilityServer continues to run during programming via iETS without limitations and also continues to carry out switching actions, the process image also remains up-to-date

## Connection possibilities

- 1 serial interface
- 1 RJ 45 network connection, 10/100 Mbit Ethernet
- To the Instabus KNX/EIB system via: Bus coupler UP 2 Order No. 0645 00 Instabus data interface FT 1.2 Order No. 0504 .. Instabus RS-232 connection cable Order No. 0906 00
- ISDN modem integrated (1 x EURO-ISDN-S0 RJ45 for direct connection to the NTBA or S0 of the phone system)

## Software commissioning

- The Gira FacilityServer 2 Expert for operating systems from Windows 98TM to Windows XPTM including Internet Explorer
- Inclusion of the ETS group addresses
- Inclusion of graphics programmes

## Scope of delivery

- Power supply unit with connection cable, ISDN connection cable, null modem cable
- Short instructions
- Gira FacilityServer
- 19" insert with aluminium plate
- Mounting material

## Dimensions

Stand-alone device  
 W x H x D 188 x 79 x 265 mm with 19" insert  
 W x H x D 483 x 88 x 270 mm (height modules), depth with handle 304 mm

Available starting 09/2006

## Note

The data, solutions and applications used here are based on the software version 2.1. Subject to technical modifications.

## Cooperation partner for the ServerClient 15

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 www.inotec-licht.de

## MOBOTIX AG

www.mobotix.com

## AGFEO GmbH & Co. KG

www.agfeo.com

## Robert Bosch GmbH

www.bosch-hausgeraete.com

## Revox GmbH

www.revox.com

Further information is available in the Gira catalogue or under [www.gira.com/facilityserver](http://www.gira.com/facilityserver)

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