



# KNX CONTROL


EN

The „easy use“ - KNX Visualization



DIVUS IS  
AESTHETICS & DESIGN  
CONTROL & TECHNICAL INTELLIGENCE  
SECURITY  
SIMPLICITY

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# KNX CONTROL

KNX is an international standard for home and building automation, which integrates all components of a building. The intelligent control of illumination, intercom and energy management increases the comfort of the residents, as well as the efficiency and safety of a building.

With KNX CONTROL, DIVUS offers a complete package as visualization solution that is versatile, intuitive, quickly ready for use and at the same time covers the entire range of products.

The visualization package for KNX systems meets all needs from simple to complex, from small apartments to large companies. The product selection is tailored to individual requirements and specifications of each project. After that, the installation done by a specialist generally runs smooth and quick. Also thanks to the included DIVUS OPTIMA surface, which is very easy and intuitive to control via smartphones, tablets or touch panels. A significant added value brings the high-quality design of the products, which can easily be integrated into the architectural appearance of each building and customized on individual requests.

The complete solution provides the desired comfort, comprehensive functionality and unique quality of life. With one touch on the screen, each room has the ideal climate and a pleasant atmosphere, which is created by different light, temperature and music scenes. The entire building is built with the help of intelligent home technology from DIVUS and individually adjusted to personal wishes and needs of its inhabitants. The system can be expanded and combined with lots of different devices.

## KEEP THE BUILDING ALWAYS IN VIEW:



### Building & Energy:

Management and control of illumination, shadowing, heating & cooling, etc.



### Intercom:

Watching, talking and controlling of all access areas



### Entertainment:

Control of audio- und video systems

(Multi-room, web-communication, e-Mail, web-services, news- and information-services, etc.)



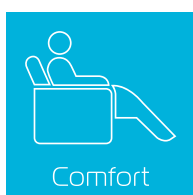
### Security:

Control and management of security systems, surveillance cameras, etc.



# SMART ADVANTAGES

## Intelligent living



Relax, your home takes care of your comfort! Only one touch on the screen and pre-programmed scenes provide the desired atmosphere. You will create the right ambience for a cosy movie night in seconds - everything happens automatically, the shutters go down, the room temperature is getting comfortably warm, the lights are dimmed, the TV turns on, you only have to take a seat on the couch and enjoy the evening.

You can sleep calmly! Whether you are at home or on the road, you have always an overview what happens in or outside of your house. The integration of alarm systems, smoke detectors and video systems assure your home is secure at all times. But not only external circumstances can cause risks or unexpected conditions, therefore a Smart Home supports everyday life and in all stages of life. Notifications and alarms can be automatically sent to service providers or family members in case of an irregularity or conspicuousness.



Wake up with your favorite song, cook with radio entertainment and enjoy a bath with lounge music! The Multiroom Audio system allows you to access the central music library and to fill each room individually with the desired music programme. Additionally you stay always informed with your touch panel at your fingertips! You can already check at breakfast weather forecasts, traffic reports, e-mails, news and many other useful information you need for a successful start to the day.

Save money and energy without sacrificing comfort! The intelligent power management system of DIVUS controls your building automatically and efficiently through various sensors. Heating, cooling, shadowing, illumination, ventilation and other power sources are optimized and controlled by an interaction of logical links. This not only reduces energy consumption but also enhances well-being of its the residents. Heating periods can be programmed very easily, for instance the temperature can be reduced automatically during bedtime and raised again in the morning before getting up.



Stay flexible! Living conditions can change at any time, but the system is modifiable and can be easily adapted. Therefore it is no problem to change an office into a children's room. No new wires are needed, as switches are able to assume entirely new tasks just through re-programming.



# KNX CONTROL

Intelligent and intuitive  
from the beginning on.

## Installation made easy

### Simple:

Create a project file by using the OPC export of ETS and import it in DIVUS OPTIMA. In short time the visualization can be realized including the most important functions of the system.

### Fast:

ETS functions are directly linked to the created room/ floor plan and enable a fast visualization adapted to personal wishes!

### Easy:

First system, which combines an easy installation with a just as simple commissioning. No training is needed to create a project and fulfill customer's requests.





# OPTIMA

## Everything under control

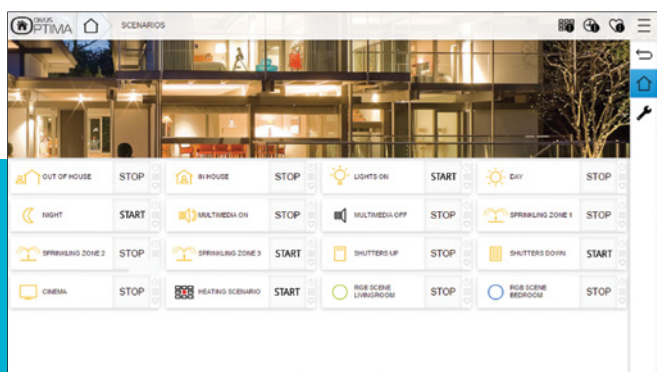
To control building technology, you need a graphical user interface that is clearly structured, intuitive and simple for both user as well as for the installer. At least the user-friendliness determines the success and the efficiency of the technology. To enable a simplified start into the world of intelligent living, the preinstalled user interface DIVUS OPTIMA is very easy to use for everyone.

The new DIVUS OPTIMA interface allows you to manage your own home or company building in a reliable and efficient way.

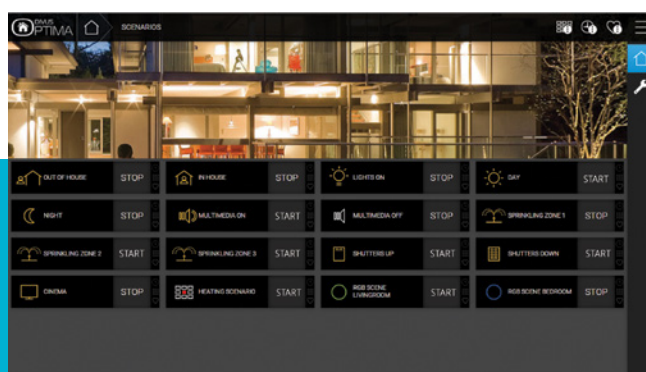
A building visualization system can be created using the new DIVUS OPTIMA interface without the need of hiring a graphics expert anymore. All that's needed to operate and use the DIVUS OPTIMA is familiarity with an image processing program and ETS software. Beginners feel as comfortable with the system as experienced users.

The system's ETS project, which is used as a basis for the realization of the visualization, can be imported into the KNX CONTROL device through an ETS OPC export. Thereby all group addresses are created and assigned to icons. Definable import rules allow automatic icon assignment, which later saves a lot of programming time during the visualization realization phase. Then rooms and zones are defined and either assigned automatically in accordance to a certain scheme or placed in the drag and drop method on a background image. The navigation menu of the visualization is automatically created at the same time.

### "COMPACT" view DIVUS OPTIMA



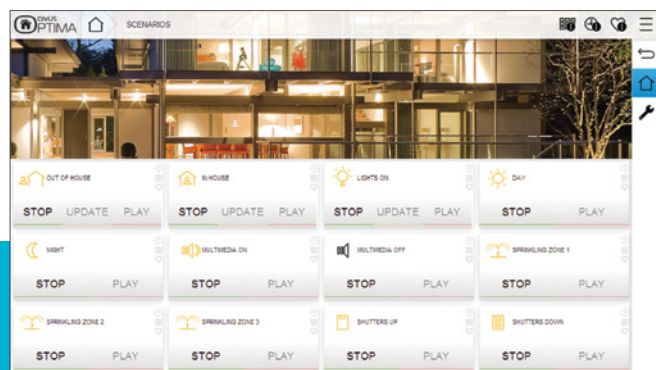
Theme Ivory



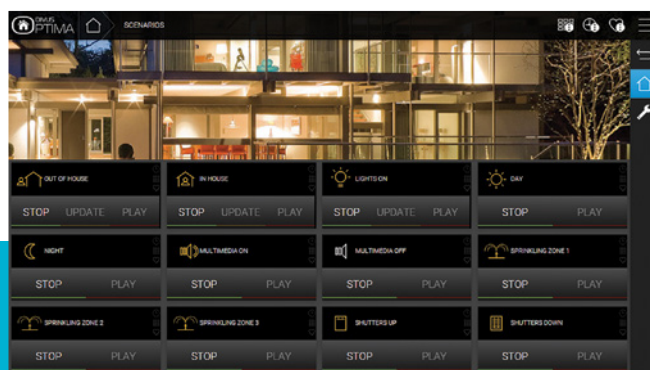
Theme Ebony



## "EXTENDED" view DIVUS OPTIMA



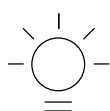
Theme Ivory



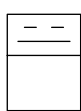
Theme Ebony

In addition to imported functions of KNX, DIVUS OPTIMA provides features like scenes, logics, timers and many other elements that allow you to add extended functionality to your project. Useful additional functions can also be used via integrated plug-in, including the integration of IP cameras, online weather forecast, news tickers, web browsing, generating alerts, monitoring of energy consumption data and much more.

You can choose between two different themes of the DIVUS OPTIMA interface, so that it fits perfectly to the design of the touch panel, the user's taste and the architectural environment.



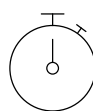
Light



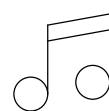
Shading



Temperature



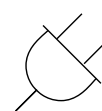
Scenes



Entertainment



Security



Energie

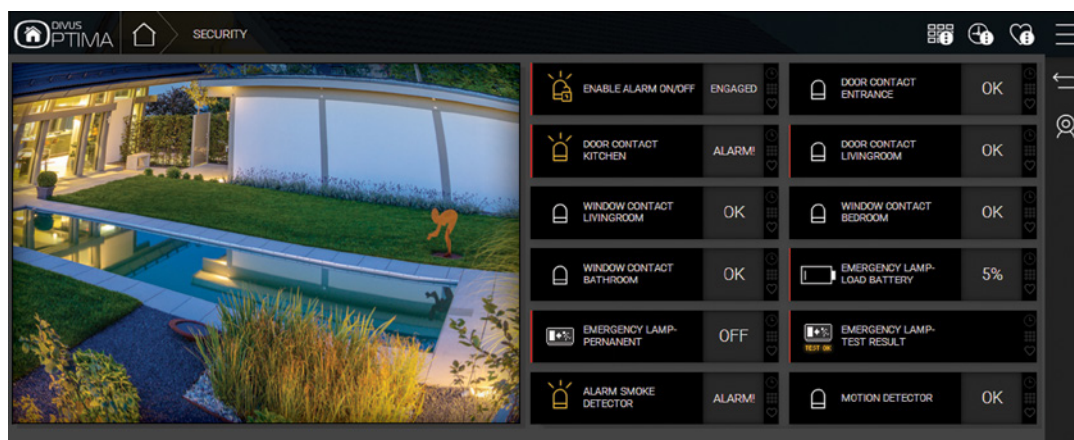


# SECURITY

## A good feeling

Times are changing. Security, monitoring and control are getting more and more important for the protection of you, your family and your home. Prevention is better, therefore we provide the possibility to integrate systems for intruder alarm, fire alarm or video surveillance in DIVUS products. As everybody wants to be able to sleep peacefully and enjoy vacation without worries.

IP cameras or additional safety-control programs can be integrated into our touch panels or directly into our KNX OPTIMA visualization. You can plan and decide for a customized solution adapted to your needs: you will have the possibility to know what is going on inside or outside your property at any time. - get the information and notifications directly from the displays in your house and even while on the road from your mobile devices.



## For all stages of life

Technology should serve the people, not the other way round!

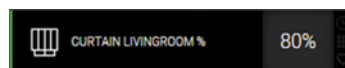
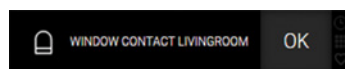
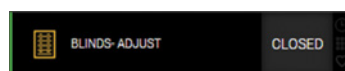
As you grow older and slow down a bit, the intelligent house makes your life easier. A Smart Home should support people of all ages and simplify their everyday lives. Many different functions of our operating and control system KNX CONTROL help to do so. Simple control, easy understandable functions and correspondingly large input objects support the needs of each generation. Warnings and alarms can be sent automatically to service companies, the police or family members in order to prevent dangerous situations.

# DOORS & WINDOWS

## Reliable guards

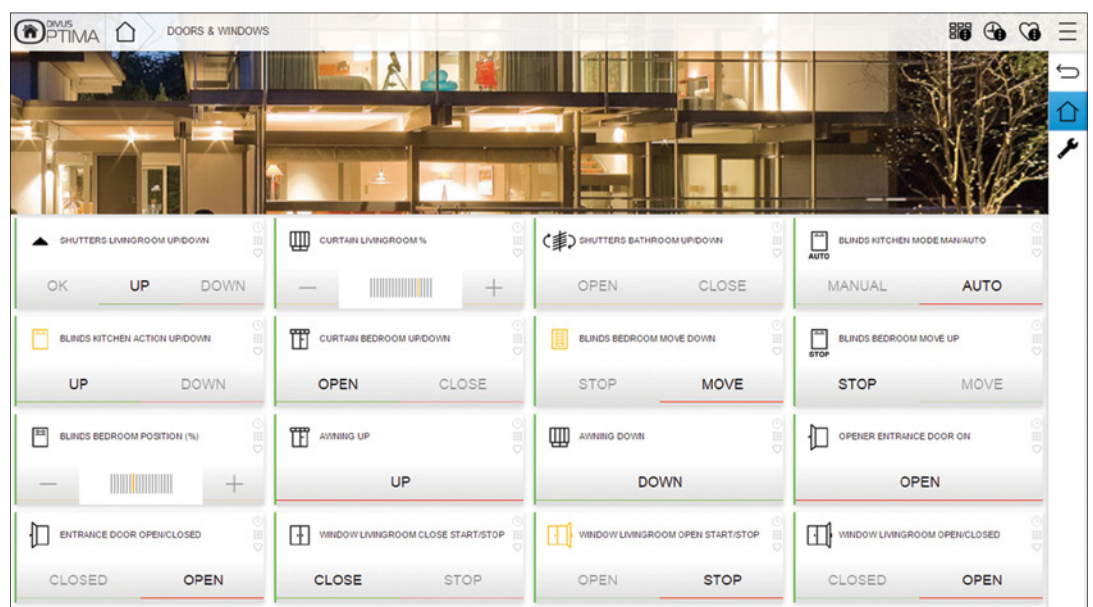
In our home, we want to feel comfortable and always know what is happening around us. When we are leaving the house all windows and doors should be closed. Integrated window and door contacts make it possible to get always an comprehensive overview or to create desired scenes with just one touch on the screen.

Doors, windows, shutters and blinds can be controlled and handled in a very simple way due to DIVUS OPTIMA.



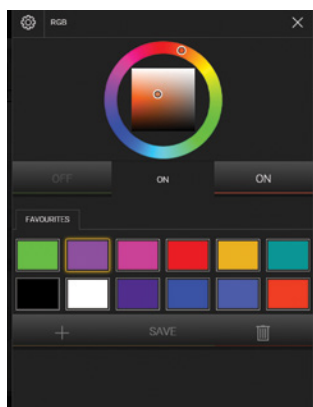
Graphic icons allow to control blinds precisely, let windows automatically tilt or you can even use the visualization as control center to identify open door and/ or window contacts. Furthermore you can integrate the monitoring of the door and window contacts into your alarm system in order to make sure that nobody enters the building without your authorization and knowledge.

The single functions can also be connected, forming a complex object, or simply be part of a scene, in order to keep the visualization always clearly structured and to raise its usability.



# ILLUMINATION

## In the right light

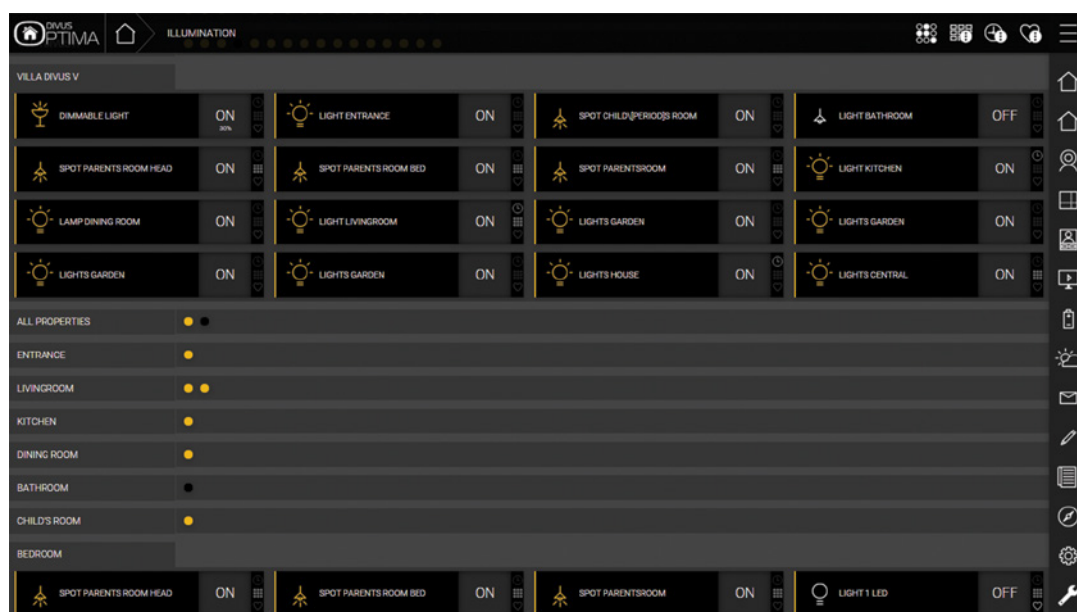


Every single light point of your building can be controlled in a fast and easy way with DIVUS OPTIMA: thanks to different graphic elements you have a lot more options than just „ON/OFF“ actions. You are able to carry out dimming functions and select a RGB color of your choice.

And if you're out of the house, don't worry: your KNX CONTROL device will do the work for you. The flexible time scheduling permits to execute commands at certain times, if needed also over a longer time like months or weeks. Or you let decide your building through intelligent control systems - light and obscurity can be controlled automatically depending on the brightness.

To create scenes, which make it very easy to turn a room into the right atmosphere very quickly, you can combine single light points.

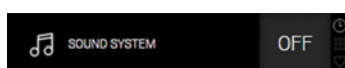
Thanks to DIVUS OPTIMA it is very easy to define different functions which give you an overview of the current situation and control the single elements per finger tap.





# ENERGY

## Save smart



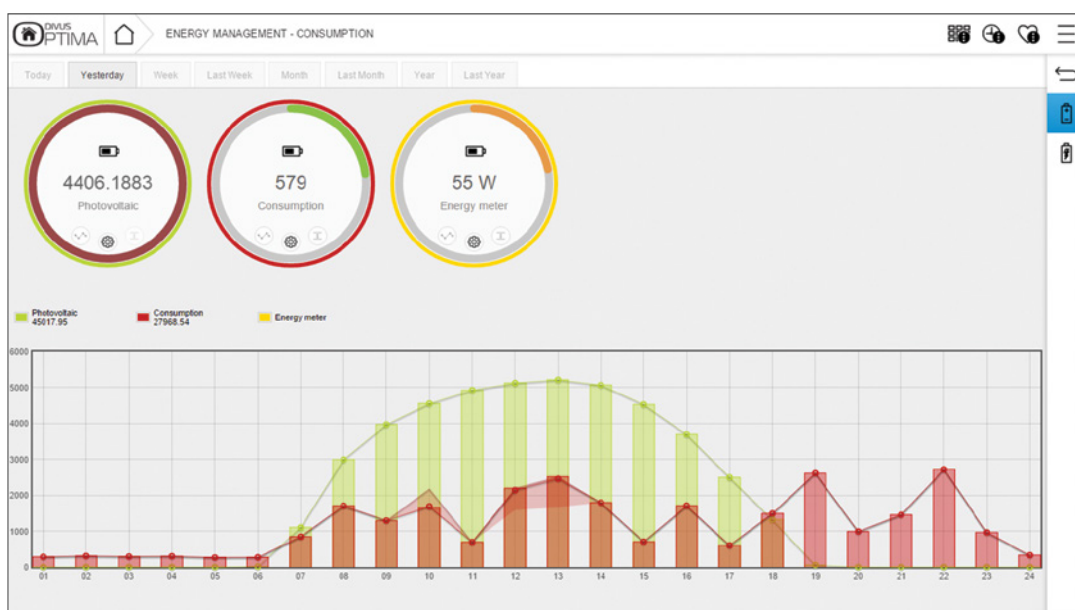
Especially for the home automation sector is a flexible and simple energy management solution really important: whether it is to keep the energy costs as low as possible or the usage of alternative energy sources to produce own energy. The energy data provided by the energy system should be accessible and understandable in a clear and simple way.

Heat your home only when it's necessary! The heating can be conveniently controlled from wherever you are. While you are heading home from work you can activate the heating with your smartphone and by the time you arrive home, the house is already warm. Or create individual heating schedules, for example to lower the temperature during bedtime and restart in the morning.

### Avoid unnecessary heating and save energy!

Your KNX CONTROL device is able to handle the information from each kind of KNX counter, independent from the provided data (electric values, gas or water consumption, etc.). The received values are registered from your KNX CONTROL device in real time and can be displayed in different graphical formats.

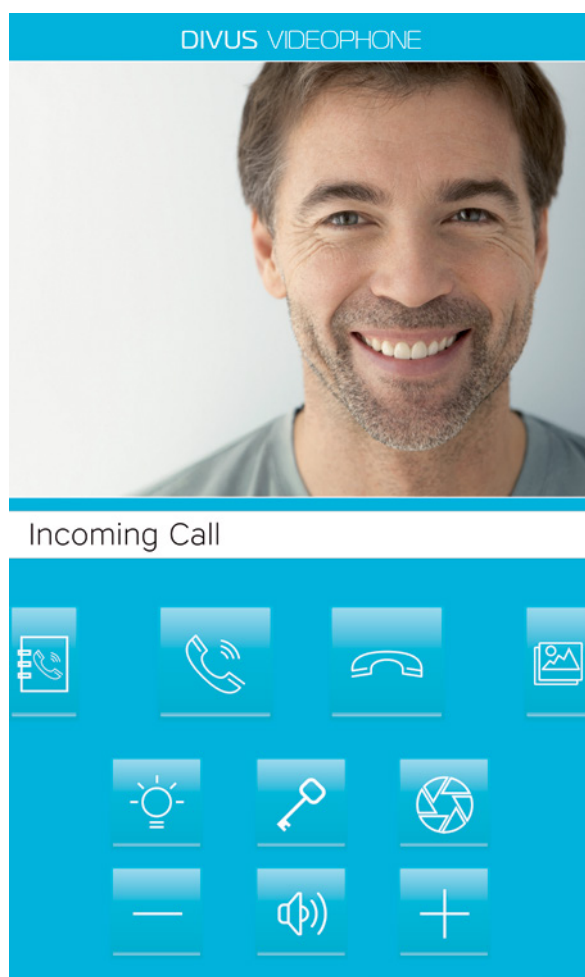
The registered values are not only for providing information, they can also be used to switch on or off single loads or consumers. This integrated load control feature can be customized and ensures that your energy consumption is always within the desired range.





# INTERCOM

## Welcome



Door communication is now even easier thanks to DIVUS HEARTBEAT.

The intercom system, in which internal and external devices interact, is protected by a firewall via its own port and is therefore completely safe while still offering an unrestricted functionality.

A smart combination for more comfort and design!

The control of the house and door communication can be easily combined in one control panel. With this useful combination the control of a smart home becomes more simple and clear.

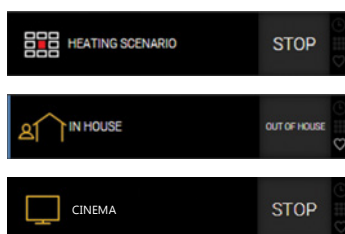
With the DIVUS door communication system meet elegant design with highest safety standards and complete comfort already at the front door. The new DIVUS VIDEOPHONE software sets new standards in the visualization of video intercoms. By means of DIVUS VIDEOPHONE a touch panel or smartdevice (like smartphone or tablet) turns into a full-fledged video intercom station. It can be used either stationary in a smart home or in mobility.

DIVUS VIDEOPHONE shows incoming calls directly on the screen - see the visitor immediately, communicate with him and if necessary open the door from wherever you are.

# SCENES

## Just one touch needed

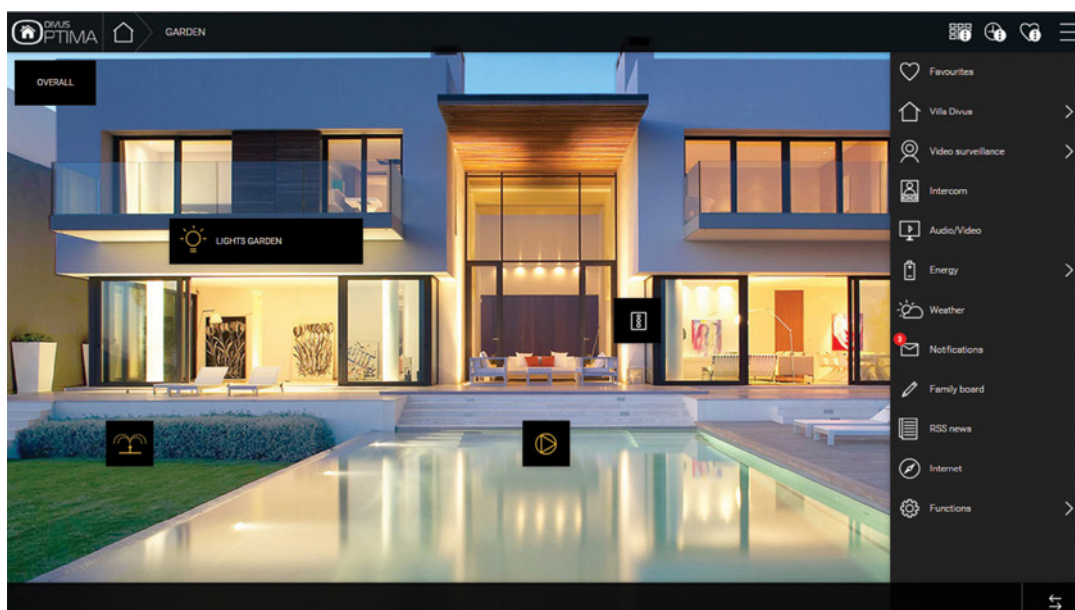
DIVUS OPTIMA gives you the possibility to set up own scenes, which allows to handle different kind of commands in a combined way. Whether it should be a cinema eve, a romantic dinner or the well-known "ALL OFF" – command: one click is enough and your KNX CONTROL device creates the desired atmosphere.



The scenes of DIVUS OPTIMA aren't restricted to KNX functions: you can use the scenes in order to control one of the linked Multiroom-, alarm systems or send out notifications. The different actions can furthermore be executed with a delay, which permits to run scenes also over a longer time period.

The management of scenes can be done in multiple ways: either control them manually through the visualization or let the scenes be started or stopped automatically by connecting them to time schedules or events which are controlled by the KNX system. You can easily re-programm actions within a scene and small changes can be made without any effort.

The control of an irrigation plant is a possible scene: after activating the scene different valves will be opened, which are responsible for the water supply. This can be carried out with an adjustable time delay and if necessary taking into account holidays or seasonal exceptions. The execution of the scene can furthermore be coupled with the data from a weather station, for example to interrupt irrigation in case of rain.



# SCHEDULING

## Timing is everything

With the OPTIMA interface, almost every object can be timed: whether to start a scene at a certain time, or control irrigation valves directly. Everything can be easily adjusted through the intuitive scheduling options of the OPTIMA interface.



Once plan and DIVUS OPTIMA takes care about your house around the clock!

Besides simple daily schedules you can also create long-term schedules, like weekly or monthly plans - and if required, even considering public holidays or vacation periods. The scheduling function is easily accessible and can be adapted from the user uncomplicatedly.

SCHEDULING NEW DAILY SCHEDULING

New daily scheduli

✓ SAVE

✗ CANCEL

▼ DAILY SCHEDULING

✗	◀	Hours 08	▶	◀	Minutes 26	▶	◀	Action WRITE	▶	◀	Value OFF	▶
✗	◀	Hours 12	▶	◀	Minutes 01	▶	◀	Action WRITE	▶	◀	Value ON	▶
✗	◀	Hours 14	▶	◀	Minutes 02	▶	◀	Action WRITE	▶	◀	Value OFF	▶
✗	◀	Hours 15	▶	◀	Minutes 03	▶	◀	Action WRITE	▶	◀	Value ON	▶
✗	◀	Hours 15	▶	◀	Minutes 13	▶	◀	Action WRITE	▶	◀	Value ON	▶
✗	◀	Hours 12	▶	◀	Minutes 14	▶	◀	Action WRITE	▶	◀	Value OFF	▶
✗	◀	Hours 14	▶	◀	Minutes 15	▶	◀	Action WRITE	▶	◀	Value OFF	▶

+

▼ CALENDAR-BASED SCHEDULING

Weekly

Yearly

SUNDAY

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

SATURDAY

# TOUCH PANELS

## Always keep the overview

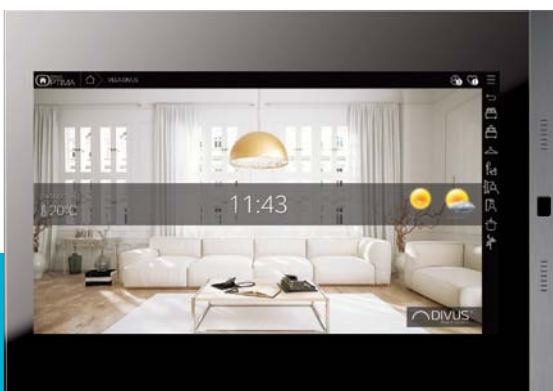
On-site or from anywhere in the world - to control a Smart Home, a touch panel, tablet, smartphone or PC with Internet access is sufficient. The devices control modern building services and serve as an interface between man and technology. They are responsible for the monitoring and security of the home, the protection of the most intimate areas of our daily lives. Therefore reliability and continuous availability have top priority!

To ensure these properties, a touch panel integrated in the wall is the ideal device for the central monitoring of the whole building. The center of information will be installed mostly in the heart of action, such as the living room, kitchen, entrance area, precisely where most of the family life takes place.

Through fixed installation on the wall, the touch panel is always retrievable and can't be easily lost, forgotten or even stolen. The latter aspect is of particular importance, especially with regard to the safety aspect. As no one wants to give the control of the alarm system or other sensitive information and functions of his home in the hands of an unauthorized person.

In contrary to smartphones or touchpads, a touch panel is a mature system that is designed for continuous operation without technical interference but with a long life cycle. Even after years, spare parts are available and extending your existing system is no problem, which makes it economically profitable for costumers. Furthermore it convinces with continuous availability as it is always connected to the power supply and LAN network. Therefore mobile devices are as a standalone solution not ideal, but can serve as a practical and flexible supplement while on the move.

Touch panels are available in different versions, thus it can be easily adapted to the interior and architectural design of a building. You have the choice between different colors, models and designs. It is also available in combination with a high-quality mirror, which has activated all functions of a touch panel whereas it looks like a conventional mirror in standby mode. Hence it fits into any wardrobes lobby, bathroom, etc..



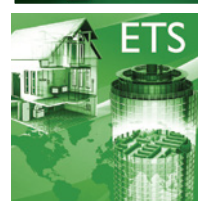
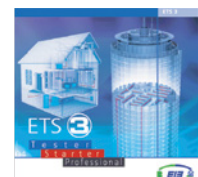
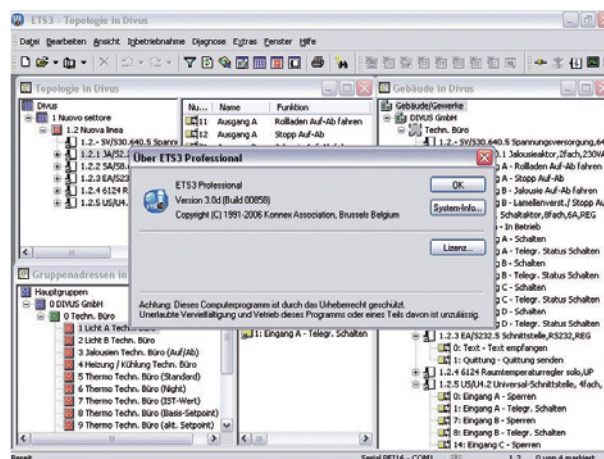
# ETS IMPORT

From the ETS project to a fully operable system - now even more comfortable!

## 1. THE START: YOUR ETS PROJECT

The starting point for your KNX supervision system based on DIVUS OPTIMA is your ETS project.

With the OPC export in ETS you can create a project file, which will contain all the information required for DIVUS OPTIMA.

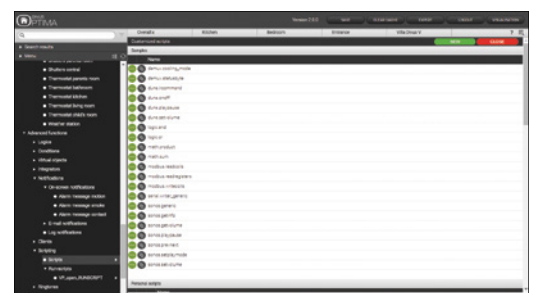
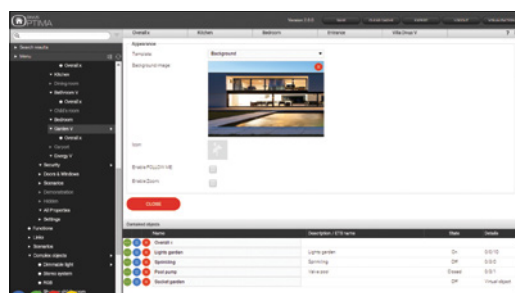


5 ETS

## 2. THE IMPORT: THE WIZARD OF DIVUS OPTIMA

In the configuration menu of DIVUS OPTIMA you can find a wizard which will help you configuring the whole visualization.

Simply select the project file created before and follow the onscreen instructions; within short time you can create a high-quality and immediately working visualization with the most important functionalities of the system.





### 3. THE RESULT: VISUALIZATION ON DEMAND!

After the import and configuration of your KNX functions the wizard gives you the possibility to define the graphical interface.

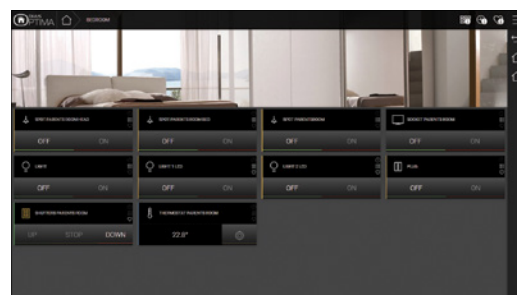
Furthermore, the wizard can be used to integrate additional functions like logics, scenes and events into your visualization or to use preconfigured templates from sectors like multimedia, weather preview or internet.

#### Theme „OPTIMA EBONY“:

Plan view: compact

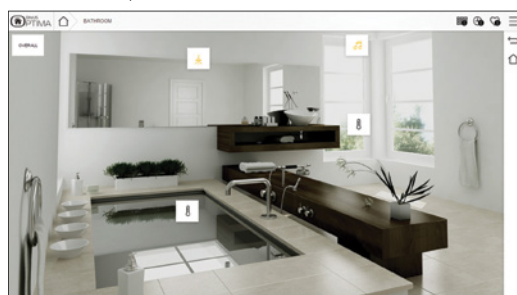


Grid view: extended with picture at the top edge

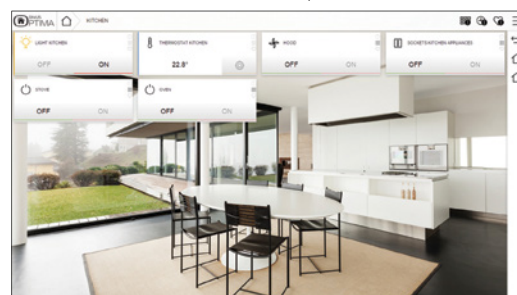


#### Theme „OPTIMA IVORY“:

Plan view: compact



Grid view: extended with full screen picture



## PDK

PROJECT DEVELOPMENT KIT



Normally, the programming of DIVUS OPTIMA is performed directly on the used KNX CONTROL device. Because such a device is not always available, with the PDK you have now the possibility to edit and present projects locally on a PC.

The PDK contains a virtual web server, which simulates DIVUS OPTIMA locally on a PC. The programming and usage of the visualization is the same as for a KNX CONTROL device, except for a few restrictions.

# KNX SERVER

DIVUS KNX SERVER is the core of the web technology based visualization solution of DIVUS for KNX systems, which gives you full control over the functions of your home. KNX SERVER has been refitted and now provides – among a noticeable performance boost – the new OPTIMA interface for creation of design-oriented visualizations.

## From KNX-M-SERVER to KNX-E-SERVER - scalable visualization solutions.

Our new KNX SERVER family covers the whole gamut of requirements in this sphere, via a cost efficient basic server that enables an ideal entry to the world of visualization. The KNX-M-SERVER (Mini-SERVER) operates in concert with mobile devices in the Apple domain (iPhone and iPad), as well as with Android devices such as different smartphones and tablet computers from vendors such as Motorola, Acer, Huawei, and many more.

And when it comes to stationary operation, the KNX-M-SERVER can communicate with our Android-based DIVUS TOUCHZONE. For all supported Android products, in addition to access to KNX visualization a SIP-based door communication app is available that can be used via our INTERCOM UPGRADE, also with our KNX-M-SERVER. This in turn allows the DIVUS TOUCHZONE to become an indoor-station for door communication. In addition to our own OPENDOOR outdoor station, we support many third-party products as well.

Our next-largest server, the KNX-H-SERVER (Home-SERVER) is a must when it comes to meeting customers' ever growing expectations as regards functionality and design. These solutions are increasingly coming into use in middle to upper class private-sector real estate (apartments and homes), as well as in smaller commercial properties such as medical practices, retail stores, offices, and production facilities.

Our KNX-H-SERVER not only offers an expanded range of functions, but also supports a full graphics mode, which allows for placement of system functions right on the background image. Both classic layout plans as well as actual images of a given space can be used as background. Depending on the functions an object supports, having been put in position it can be either activated directly or can serve as a gateway to extended entry options. The onscreen menu bar allows for user friendly navigation and features a tree view of the relevant spaces (for rapid opening of the desired pages) as well as dedicated areas for the management of functions such as light, climate, shading, security and the like.

This menu also provides access to various plug-ins that allow for management of additional functions such as scenes and provides access to web content, weather reports, news tickers, and message boards.



### HARDWARE

Size	142 mm x 98 mm x 62 mm
Ports	1x LAN - 2x USB - 1x KNX - 1x SD-Slot - 1x RS232 - 1x RS485
Power supply	12 - 30 V DC
Operating temperature	0°C - 50°C

### SOFTWARE

Recommended browser for remote access	Google Chrome
ETS - compatibility	ETS 3 + 4

# Function overview KNX SERVER

	MINI KNX-M-SERVER	HOME KNX-H-SERVER	ADVANCED KNX-A-SERVER	ENTERPRISE KNX-E-SERVER¹
Number of KNX group addresses	150	750	1.500	unlimited
Number of scenes	30	100	100	unlimited
Number of time functions	30	100	100	unlimited
Number of logics	30	100	100	unlimited
Energy counters	6	18	36	unlimited
IP cameras	not supported	unlimited²	unlimited²	unlimited²
Number of screens	10 (no background view)	unlimited	unlimited	unlimited
Supported clients	iOS (APPLE): iPad, iPhone ANDROID: alle supported tablets und smartphones DIVUS: TOUCHZONE	iOS (APPLE): iPad, iPhone ANDROID: all supported tablets and smartphones DIVUS: TOUCHZONE, SUPERIO, MIRROR, DOMUS, DIVA, HOME		
INTERCOM	only with INTERCOM-UP- GRADE	1 outdoor intercom + 3 indoor intercom available, additional with INTERCOM-UPGRADE		
TK SYSTEMS	DIVUS OPENDOOR, third- party product with video- phone-box	DIVUS OPENDOOR, third-party product with videophone-box		
Data collection	1 diagram with max. 5 data points, additional diagrams with UP-DATALOG-SW			

<sup>1</sup> only on request

<sup>2</sup> unlimited, if it allows the performance of the client device

The next step up – our KNX-A-SERVER (Advanced- SERVER) – is designed for use in large private sector properties or commercial buildings. The only difference to the KNX-H-SERVER is the higher limitation for group addresses and energy counter creation.

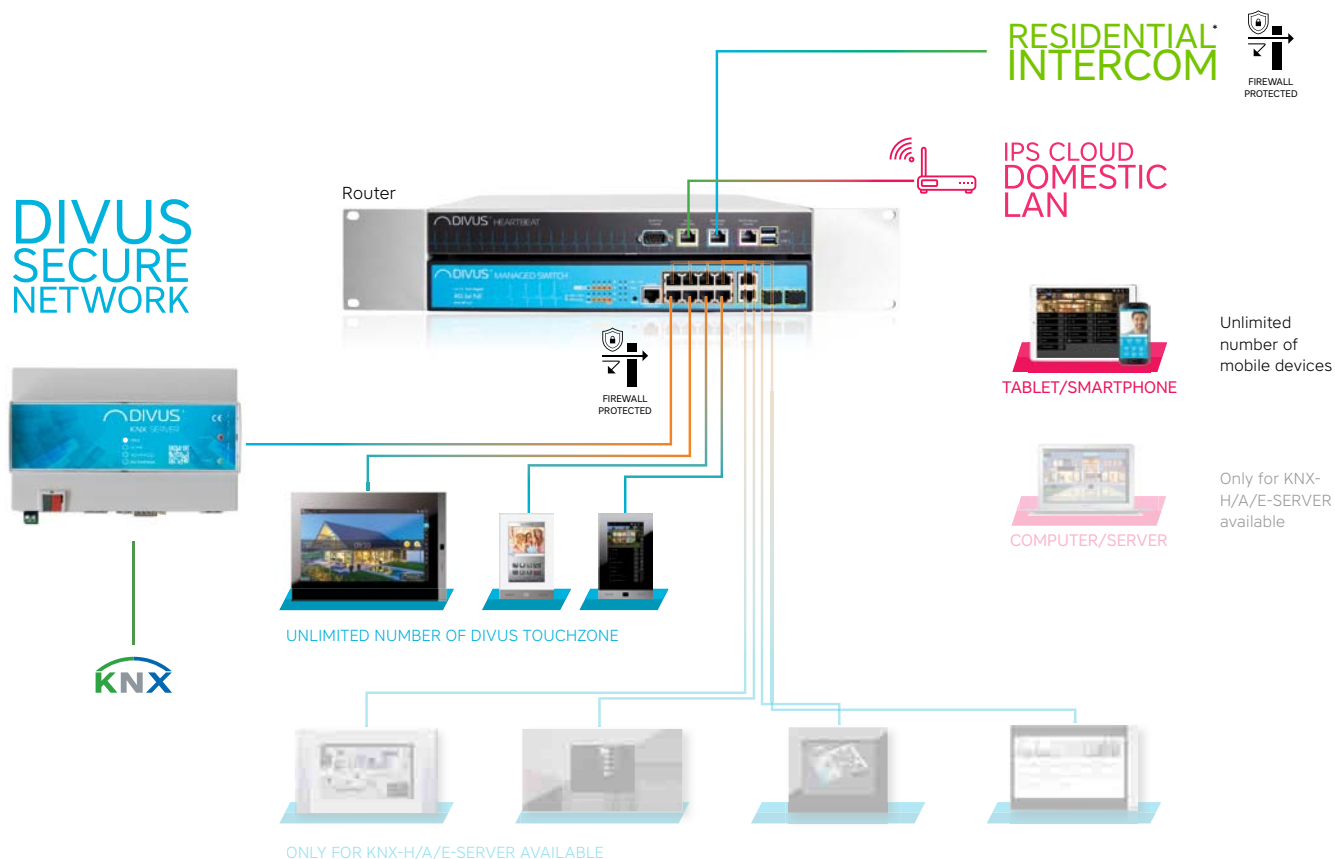
Our top of the line server, where the sky's genuinely the limit, is our KNX-E-SERVER (Enterprise-SERVER), which can be used for large-scale projects and adapted to their requirements.

## The intelligent server



# KNX MINI SERVER

## KNX-M-SERVER



### SOLUTION 1 • PRINCIPLE FUNCTION

This solution offers the favorable entrance in the KNX visualization world. The specifications of the KNX-M-SERVER can be taken from the respective datasheet.

Any number of DIVUS TOUCHZONE or mobile Devices can be integrated. DIVUS TOUCHZONE is delivered with DIVUS LAUNCHER. The Videophone app is not a part of this solution, because no Intercom functionality is offered. The access to the visualization of the DIVUS TOUCHZONE occurs through the DIVUS LAUNCHER which supports a horizontally as well as vertically presentation. Intercom stations can be integrated into the system via DIVUS HEARTBEAT.

#### WHAT I CAN

Full access to the functions provided by the KNX-M-SERVER (see datasheet)

SIP communications between outdoor intercom and DIVUS TOUCHZONE\*

Expandable by arbitrarily many other DIVUS TOUCHZONE or mobile devices on Android- or iOS base.

Integration of other Android applications through the DIVUS LAUNCHER of DIVUS TOUCHZONE

#### WHAT I CAN'T

To define more functions than by the limits of KNX-M-SERVER specified - see solution 3

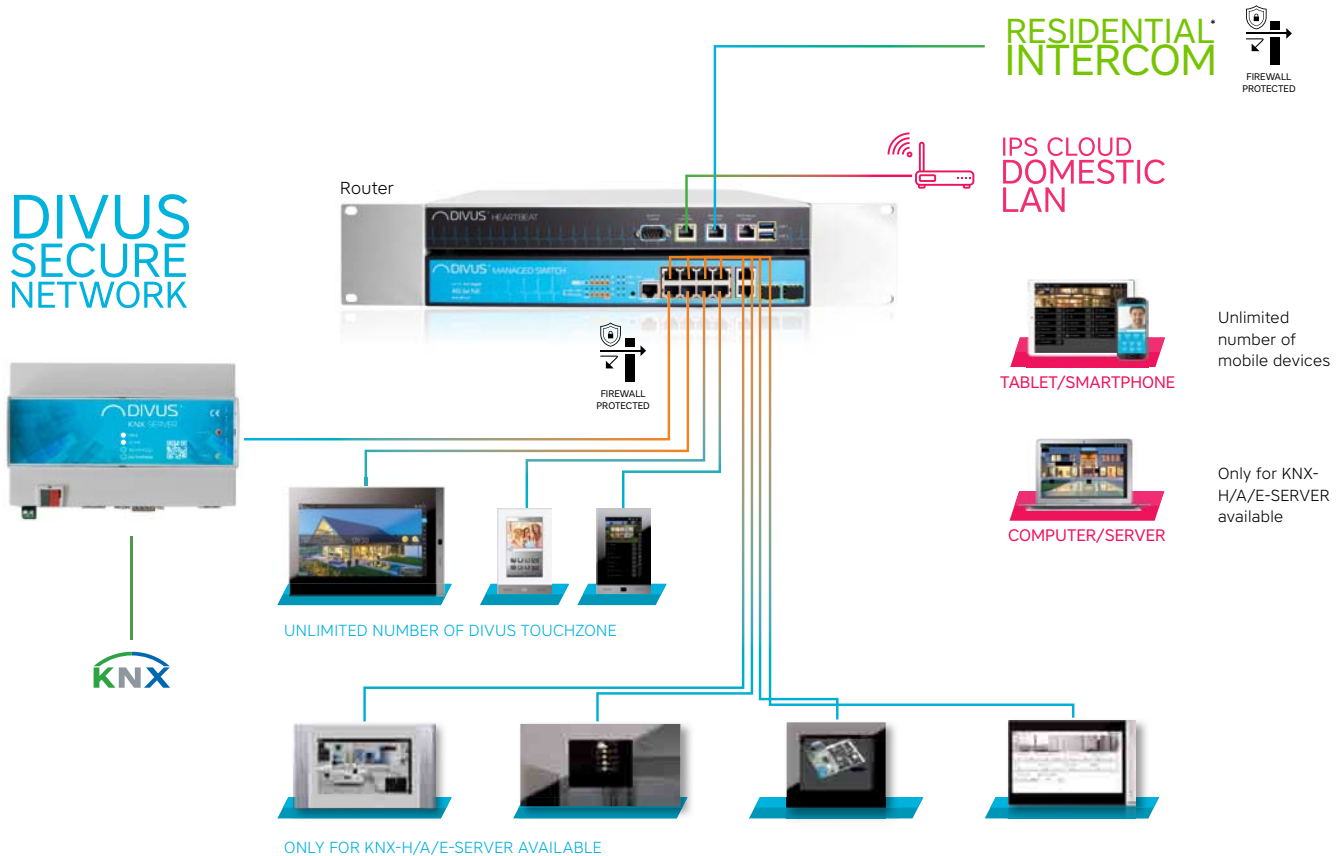
Intercom functionality - see solution 2

Integration of other devices than DIVUS TOUCHZONE or mobile devices (no touch panels, desktop PCs, etc.) - see solution 3

\*Intercom functionality without DIVUS HEARTBEAT, is only possible with Intercom Upgrade - see page 29-.

# HOME-ADVANCED-ENTERPRISE

## KNX-H/A/E-SERVER



## SOLUTION 2 • PRINCIPLE FUNCTION

This solution behaves, in principle, like the before described solution 1 „KNX-M-SERVER“, with the difference that the limitations of the KNX-H/A/E-SERVER are valid; the exact specifications of KNX-H/A/E-SERVER can be taken from the respective datasheet. Any number of DIVUS TOUCHZONE or mobile devices can be integrated.

In this case DIVUS TOUCHZONE is delivered with DIVUS LAUNCHER and VIDEOPHONE app.

KNX-H/A/E-SERVER offers already a base Intercom support which allows the configuration of 1 outdoor intercom and 3 arbitrary indoor units.

### WHAT I CAN

Full access to the functions provided by the KNX-H/A/E-SERVER (see datasheet)

SIP communication between DIVUS TOUCHZONE or touch panels and outdoor intercom\*

Imaging of the video signal from the outdoor intercom at DIVUS TOUCHZONE / Touchpanel

Extendable by arbitrarily many other DIVUS TOUCHZONE, mobile devices on Android- or iOS base as well as any touch panels, desktop computers etc.

Integration of other Android applications through the DIVUS LAUNCHER

### WHAT I CAN'T

\* Without DIVUS HEARTBEAT: Use of Intercom functionality with more than 1 outdoor intercom station or more than 3 indoor units only with Intercom Upgrade - see page 29 -.



# KNX SUPERIO

## Standalone

KNX SUPERIO is also a member of the DIVUS KNX CONTROL family for controlling KNX systems. Compared with KNX SERVER, KNX SUPERIO is a standalone device, optimized for the use in smaller systems.

Also in this case DIVUS OPTIMA accompanies the user step by step and allows him to create a visualization easily by selecting the proposed pre-configured command and application pages. Consequently, KNX SUPERIO unites a simple control concept and a just as easy programming - in one device!

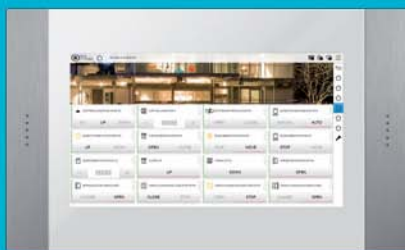
KNX SUPERIO dovetails with the Green touch panel philosophy of DIVUS: the panel equips a LED widescreen color display, 1 LAN interface, microphone, loudspeakers as well as an energy saving processor of the newest generation.

## Function overview KNX SUPERIO

	KNX SUPERIO 10	KNX SUPERIO 15	KNX SUPERIO 19
Number of KNX group addresses		750	
Number of scenes		100	
Number of time functions		100	
Number of logics		100	
Energy counters		18	
IP camera		unlimited	
Supported clients	IOS (APPLE): iPad, iPhone - ANDROID: all supported tablets, smartphones and DIVUS TOUCHZONE		
INTERCOM	1 outdoor intercom + 3 indoor intercom available, additional with INTERCOM-UPGRADE		
TK SYSTEMS	DIVUS OPENDOOR, third-party product with videophone-box		
Resolution	WSVGA 1024 x 600	WXGA 1366 x 768	WXGA 1366 x 768
Power supply		100 - 240 VAC	
Power consumption	Max. 20W	Max. 30W	Max. 40W
External dimension (with frame)	333 x 200	510 x 306	600 x 345
	integrated KNX interface		
Data collection	1 diagram with max. 5 data points, additional with diagrams with UP-DATALOG-SW		



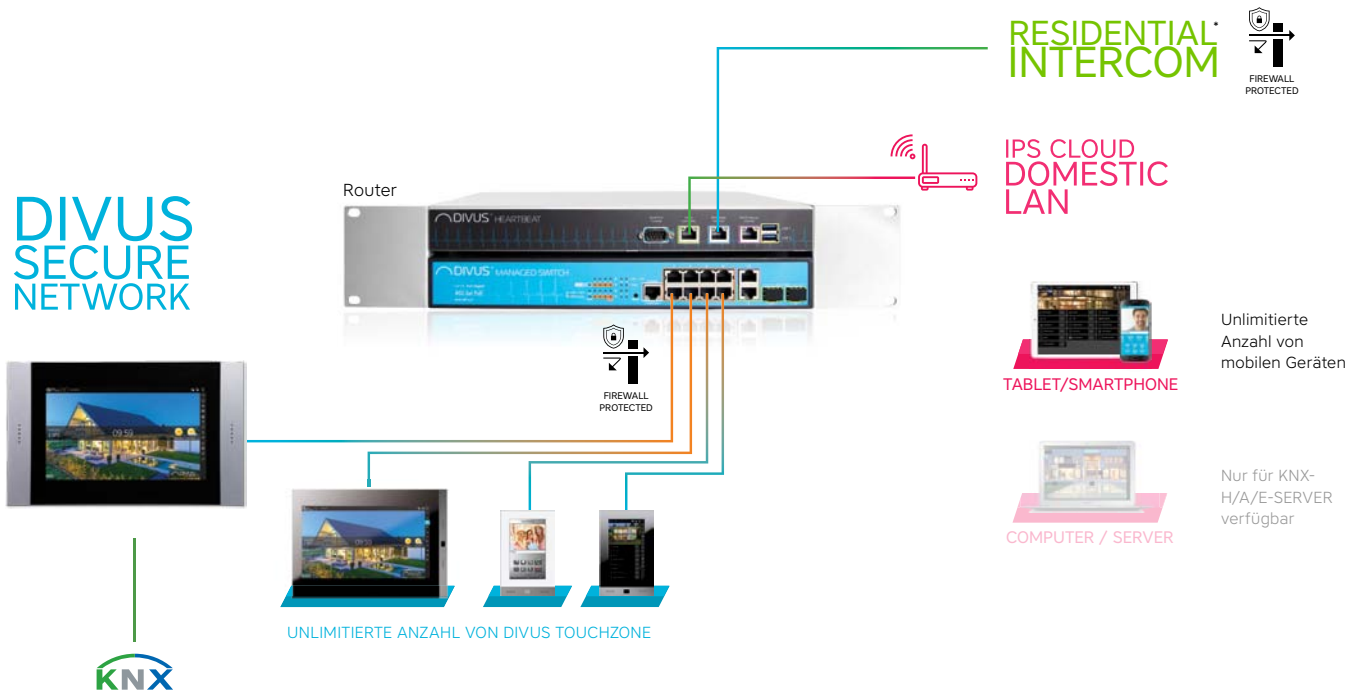
SUPERIO 19



SUPERIO 15



SUPERIO 10



\*Without DIVUS HEARTBEAT: Use of Intercom functionality with more than 1 outdoor intercom station or more than 3 indoor units only with Intercom Upgrade - see page 29 -.

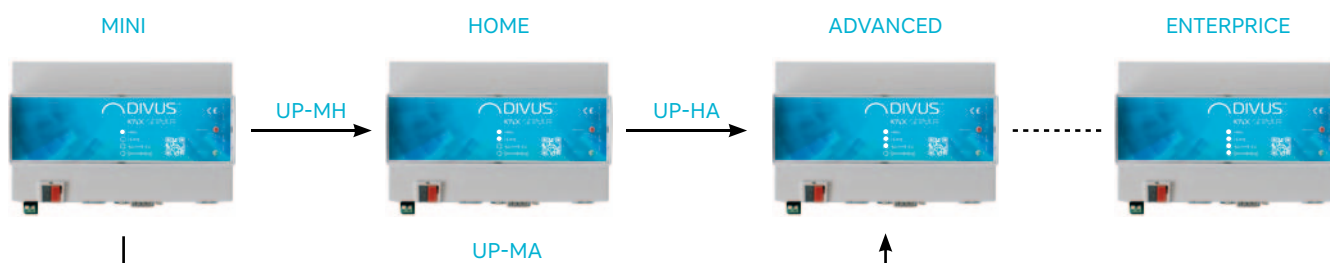


# UPGRADES

KNX SERVER  
Upgrade

## KNX SERVER

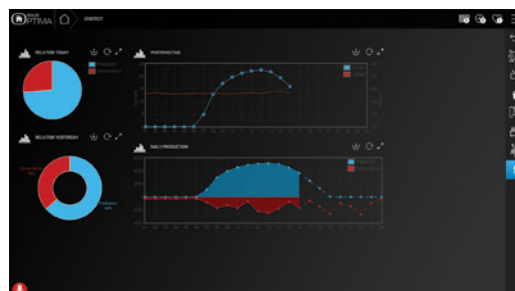
Since all versions of KNX SERVER are based on the same hardware, a KNX SERVER can be converted to a higher version through software-upgrades. It is enough to change a software license in OPTIMA and the device has the desired version and the associated limitations. Thus, e.g. a KNX-M-SERVER can be converted into a KNX-H-SERVER in shortest time, without the need of any additional hardware components. This KNX SERVER offers highest flexibility for extensions or enlargements of KNX installations.



Graphical  
Logging

## UP-DATALOG-SW

Even with the basic version of DIVUS OPTIMA it is possible to record electrical loads graphically, as well as display max. 5 freely selectable data points ( for example, temperature , brightness ... ) graphically in a separate chart. With the UP-DATALOG-SW you can create as many diagrams as desired, each diagram can contain up to 10 different data points. The appearance of the diagram and the representation of the data points of the graph are freely definable. Thus, various diagrams can be created that can be adapted graphically to its purpose, so that the user gets an overview of the current situation in an easy and rapid way.

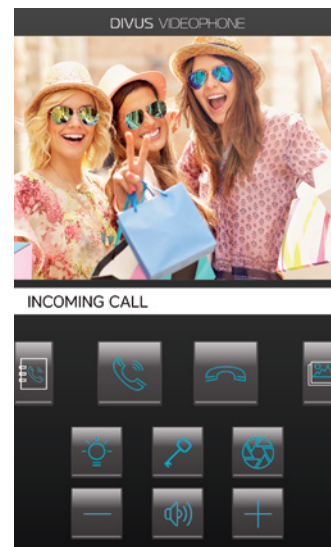




### UP-INTERCOM-SW

In the standard version of DIVUS OPTIMA the Intercom support is limited or not available (KNX-M-SERVER) depending on the specific KNX CONTROL product. With the UP-INTERCOM-SW the Intercom support can be extended in DIVUS OPTIMA to 20 internal units and 10 external units. This is necessary especially in larger systems, for example if multiple entrances are provided with a door station or numerous indoor units are present in the installation.

The KNX-M-SERVER has no intercom support in the basic edition. Nevertheless, if the intercom functionality is needed, with the UP-INTERCOM-SW also on the KNX-M-SERVER the intercom support for 10 external units and 20 internal units can be enabled.



### UP-INTERCOM-HW

For the integration of analog door communication systems in OPTIMA, the special bundle UP-INTERCOM-HW was created, which includes the required hardware (Videophone-Box) and the UP-INTERCOM-SW. With this special package supported analog door communication systems can therefore be used in conjunction with KNX SERVER or KNX SUPERIO.



### UP-NFC

This upgrade enables the integration of NFC tags into OPTIMA. For practical use, a smartphone with NFC support and installed OPTIMA app is necessary. Once a NFC tag is programmed in OPTIMA, it can be linked to various actions. As soon as the OPTIMA app recognizes the configured NFC tag with the used smartphone, corresponding actions are initiated. Since NFC tags are available in many different forms, there are no limits to creativity. For example, you can affix a NFC sticker where you normally deposit your smartphone after you come home. Then OPTIMA recognizes the NFC tag and performs the associated actions: the light turns on, the blinds move into the desired position. In this way, different actions can be activated with the smartphone; simply practical.



### UP-SMS\*

With this upgrade, the KNX SERVER can send and receive SMS messages. Depending on freely definable events, the user can easily be informed via SMS about various circumstances. Furthermore it is possible to remotely activate actions via SMS through the KNX SERVER. In this way, you stay always connected to your home.

\*The UP-SMS is available for KNX SERVER only



### UP-MODBUS-SW\*

With UP-MODBUS-SW, the KNX SERVER can be connected via modbus protocol with other modbus devices. Thereby it is possible to establish the connection by cable or by modbus TCP/IP via the local network. In this way, third-party systems can be implemented via the modbus standard into the visualization.

\*The UP-SMS is available for KNX SERVER only



# OPTIMA APP

With the OPTIMA app the mobile world connects with your home. On your tablet or smartphone, you can control your Smart Home in the simplest way: from your comfortable couch you can turn on the lights or move the blinds to the desired position. No matter where you currently are, you have everything under control.

Thanks to the DIVUS OPTIMA app your home is always with you on your smartphone. With a remote connection you can check the current status, perform forgotten actions in retrospect from distance, just check the power consumption or the weather conditions.





# VIDEOPHONE APP



With the VIDEOPHONE APP you can bring your buildings door communication on your smartphone/tablet. Receive door calls conveniently on your smartphone or tablet with picture and sound anywhere in your home. You can see who's at the door, talk to your guest and activate the door opener, all comfortable from your couch.





# DIVUS HEARTBEAT

Keep it under control.

DIVUS HEARTBEAT is a hardware-software solution composed of a PoE+ enabled managed switch and an innovative manager.

Once integrated in the network, DIVUS HEARTBEAT constitutes the heart of a smart building. It ensures a stable and secure connection between the connected devices of DIVUS in a protected segment. Also third-party products for building automation are compatible and can be integrated in the secure network segment.

DIVUS HEARTBEAT provides novel functionalities and features that benefit system integrator and end-user:

No agony of choice!

With DIVUS HEARTBEAT you always make the right decision for your network.

(And the VoIP server is already integrated!)



### THE SAFETY OF A BUILDING NETWORK HAS TOP PRIORITY

Securing smart homes is becoming more and more important. Especially when sensitive security functions, such as alarm system, access control, etc. are controlled via apps, the risk of security gaps increases and the system is more vulnerable to attacks.

Thanks to DIVUS HEARTBEAT, comprehensive protection and full security can be guaranteed! Important components for building automation, which belong to a secured building network, can be connected to DIVUS HEARTBEAT and be controlled.

DIVUS HEARTBEAT divides the building network into different segments. For building automation, a completely secured „DIVUS SECURE NET“ is created; a protected intranet, in which the various devices operate without interruption and can't be attacked from the outside.

Also, the intercom system, in which internal and external devices interact, is protected by a firewall via its own port and is therefore completely safe while still offering an unrestricted functionality.



A first-of-its-kind solution for a STABLE, SECURE and CONTROLLED network!

 <p>QUICK AND EASY INSTALLATION &amp; CONFIGURATION</p>	 <p>SECURITY &amp; STABILITY OF THE NETWORK</p>	 <p>PROJECT SECURITY</p>
 <p>STATIC SCAN &amp; SYSTEM DIAGNOSTIC</p>	 <p>REAL-TIME MONITORING</p>	 <p>AUTOMATICALLY GENERATED SYSTEM REPORTS</p>
 <p>LONGEVITY</p>	 <p>ABSOLUTE CONTROL</p>	 <p>FIREWALL PROTECTED BUILDING AUTOMATION</p>

# Simple and successful installation!



## EASY AND INTUITIVE INSTALLATION OF THE BUILDING AUTOMATION SYSTEM

The intuitive system-wide configuration guides the user through the installation process. Only basic information is needed for the setup of the network with the handy web interface.



## PRECISE CONTROL AND TRACEABILITY

As soon as all devices of the building automation system have been connected with DIVUS HEARTBEAT, a scan can be performed.



## THANKS TO THE SYSTEM SCAN YOU GET AN IMMEDIATE OVERVIEW

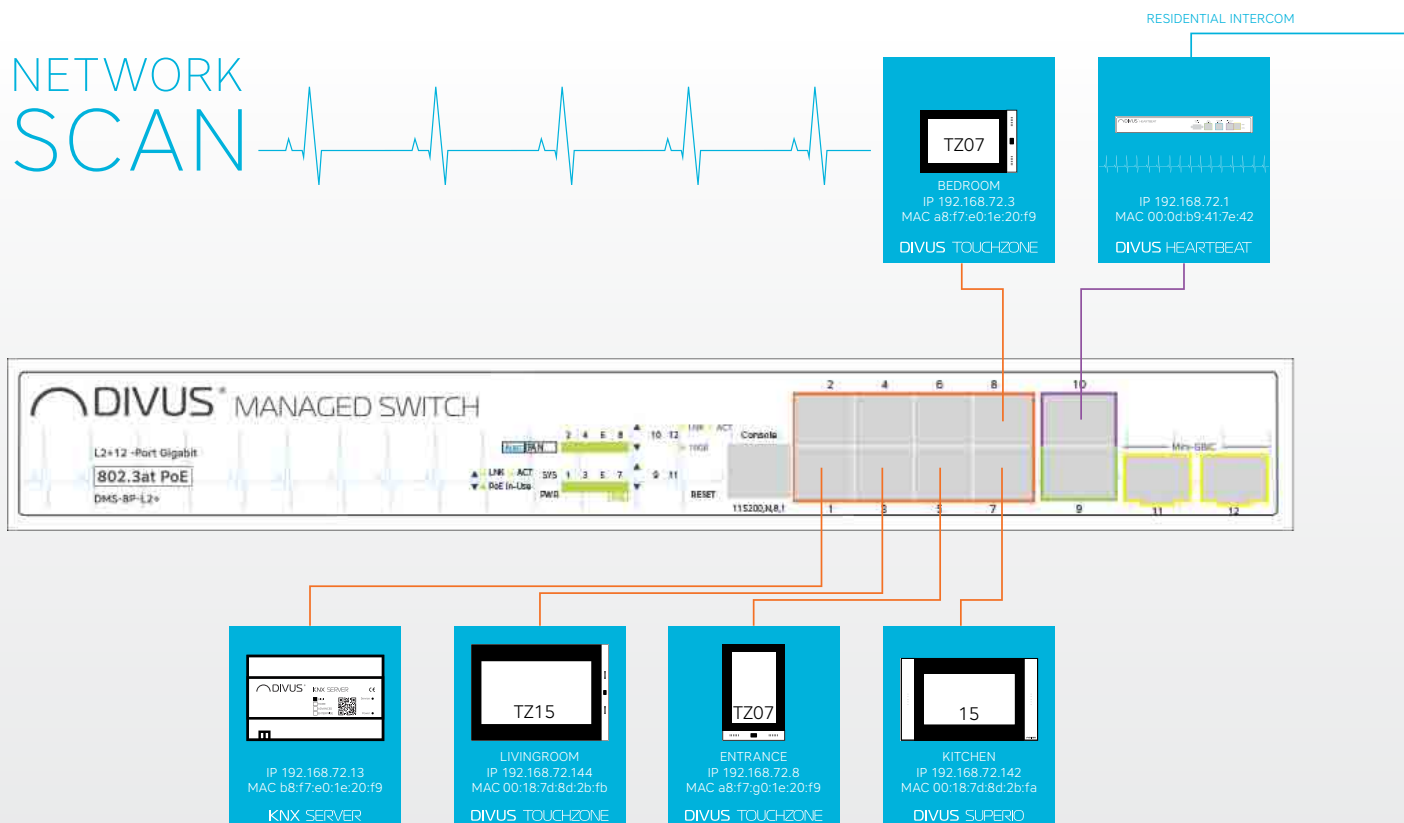
DIVUS HEARTBEAT enables a complex system scan including cable diagnostics, loop detection and a precise visualization of the entire network system. Thereby the most important information about the devices on the network, such as serial number, firmware version, IP address, etc. including possible error messages are displayed in a list. Duplicate IP addresses, loops or connection conflicts can be recognized and assigned at a glance.



After completion, the actual state of the intact building automation system and its connected devices can be recorded in a report. Subsequent changes to the network, also caused by third parties, can be tracked and reversed at any time, if necessary.

„Thanks to DIVUS HEARTBEAT, the network is finally stable and secure!“

## NETWORK SCAN





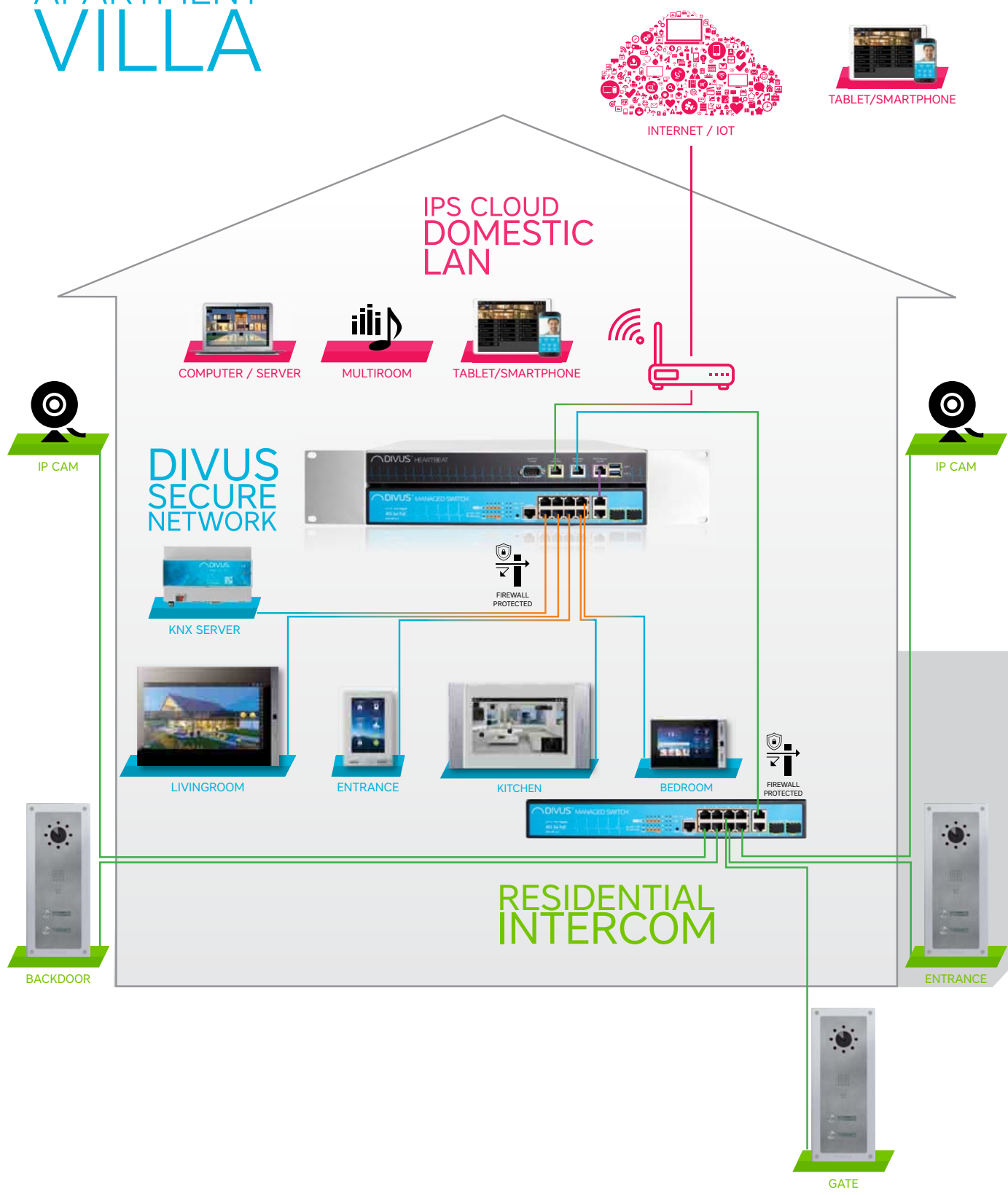
SIMPLE  
APARTMENT  
HOME

SIMPLE  
RESIDENTIAL  
2-4 APARTMENTS

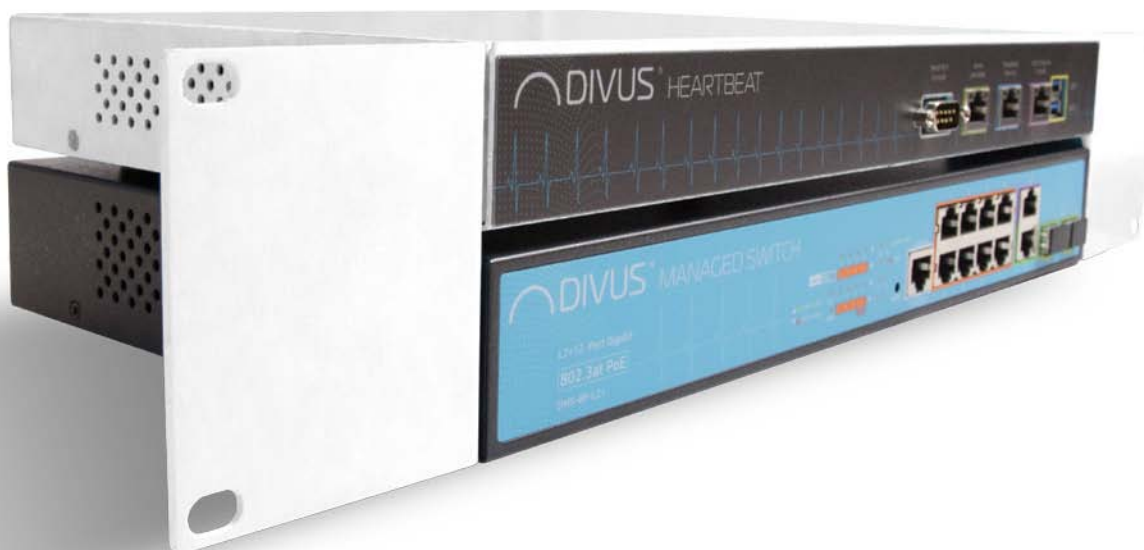
ADVANCED  
RESIDENTIAL  
TOWER

EXAMPLE OF USE

# ADVANCED APARTMENT VILLA







# DIVUS HEARTBEAT



## HEARTBEAT (DMCN + DMS-8P-L2+ )

	MANAGER	MANAGED SWITCH
<b>GENERAL HARDWARE SPECIFICATION</b>		
Power supply	100 ... 240V AC, 50/60Hz	100 ... 240V AC, 50/60Hz
Power consumption	Max. 1A (100 V AC) /max. 0,55A (240V AC)	Max. at full capacity 320 watts/1091.9 BTU (max.)
		Total max. consumption 420W
Protection grade		IP 20 EN 60529
Dimensions (W x D x H)	330 x 200 x 43.5 mm, 1U height	330 x 200 x 43.5 mm, 1U height
		Total size: 483 x 200 x 88, 2U height
Weight	ca. 1.5 kg	ca. 2 kg
		Total weight: ca. 3.5 kg
Temp. range (Usage)		Temperature: +5°C ... +45°C
		Relative humidity: 5% ... 80% at 25°C (no humidity/condense)
Temp. range (Stocking)		Temperature: -10°C ... +60°C
		Relative humidity: 5% ... 80% at 25°C (no humidity/condense)

## MANAGER

<b>HARDWARE SPECIFICATION</b>	
Model	DMCN
CPU	AMD G series GX-412TC, 1 GHz quad core (Jaguar core) with 64 bit support
DRAM	2 GB DDR3-1333 DRAM
Storage	High quality flash storage
<b>CONNECTIVITY</b>	
ETH2	Divus secure intranet - secure LAN firewall protection
ETH1	Residential intercom - high secure LAN firewall protection
ETH0	Home LAN - connected to home internal network
SERIAL PORT	Basic config (19200 8, N, 1)
USB	Basic config

## MANAGED SWITCH

### HARDWARE SPECIFICATION

Model	DMS-8P-L2+
POE standard IEEE 802.3af/802.3at PoE/PSE	8 x PoE (Port 1-8 only), total PoE power budget control, max. 30.8 watts per port (240 watts total)
Ports	1x dedicated port for connection to the manager 1x dedicated port for connection to another switch 1x RJ45 serial port (115200, 8, N, 1)
Copper ports	10x10/100/1000BASE-T RJ45 Auto-MDI/MDI-X ports
Switch architecture	Store-and-forward
Address table	8K entries, automatic source address learning and aging
Flow control	IEEE 802.3x pause frame for full-duplex. Back pressure for half-duplex
Reset button	< 5 sec: system reboot > 5 sec: factory default
Switch fabric	24Gbps / non-blocking
LED	System: fan alert (green), SYS (green), PWR (green) 10/100/1000T RJ45 interfaces (Port-1 to Port-8): LNK/ACT (green), PoE-in-use (orange) 10/100/1000T RJ45 interfaces (Port-9 to Port-10):1000Mbps (orange), 1000Mbps (orange)

### LAYER2 MANAGEMENT FUNCTIONS

Basic management interfaces	Console, Telnet, Web browser, SNMP v1, v2c
Secure management interfaces	SSH, SSL, SNMP v3
Port configuration	Port disable/enable Auto-negotiation 10/100/1000Mbps full and half duplex mode selection Flow control disable/enable
Port status	Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status



## Touch panels for each application



TZ07 - TZ10 - TZ15 - TZ19

**DIVUS TOUCHZONE**



DS10 - DS15 - DS19

**DIVUS SUPERIO**



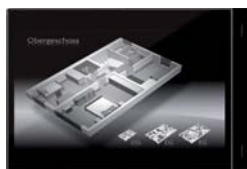
DM15 - DM19

**DIVUS MIRROR**



DD10 - DD15 - DD19

**DIVUS DOMUS**



DIVA22

**DIVUS DIVA**



DH10 - DH15

**DIVUS HOME**

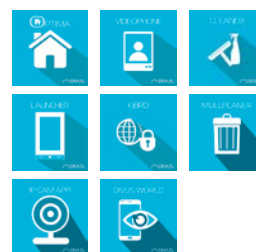
## Intercom & apps



**DIVUS OPENDOOR**



**DIVUS VIDEOPHONE**



**DIVUS APPS**



**DIVUS KNX CONTROL**



**KNX SERVER**



**DIVUS HEARTBEAT**

**DIVUS**®  
Show it. Control it.

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