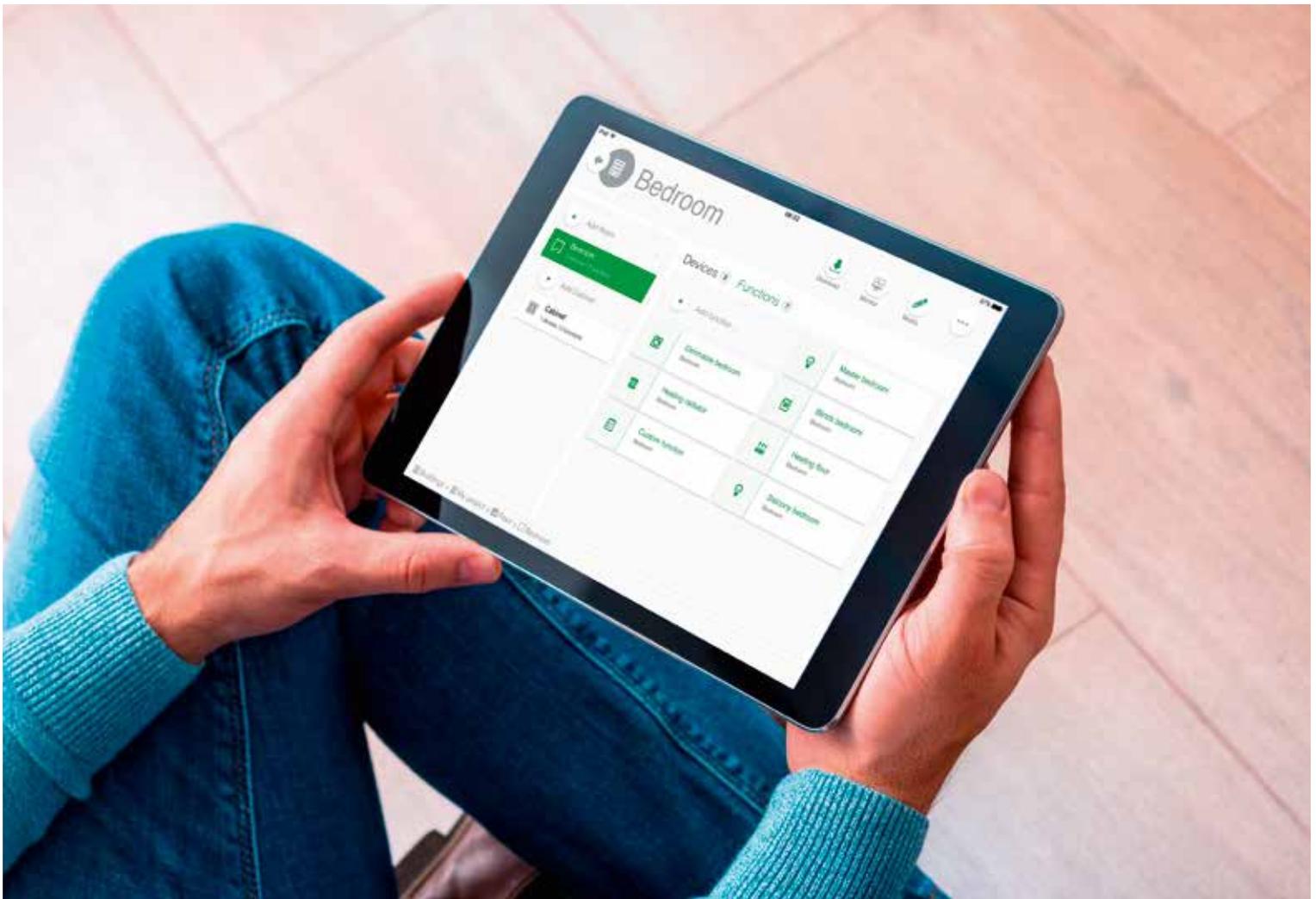




Smart home and building solutions.
Global. Secure. Connected.

ETS Inside



Inside ETS

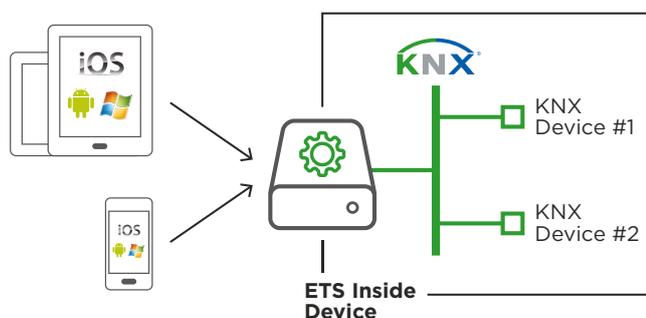
ETS Inside offers convincing arguments

- 1 ETS Inside offers installers who have minor experience with KNX an uncomplicated introduction to an increasingly diverse smart home market.
- 2 The principle of a user interface decoupled from ETS allows popular tablet and smartphone use.
- 3 ETS Inside is fixed part of the installation and the latest version is always available on site.
- 4 Electrical installers can unblock certain parameters to allow end user editing.
- 5 The project can be synchronised with ETS Professional at any time.
- 6 Under certain circumstances existing KNX Installations can be retrofitted with ETS Inside.

Operation and ETS Data decoupled

One of ETS Inside's basic principles is the decoupling of the user interface from the ETS data. This allows project editing on all common operating systems. The underlying KNX basic software is installed on the ETS Inside device that is part of the installation. This hardware also contains the KNX project and offers a web server for a decoupled user interface. Due to this new concept – in contrast to the Windows-based ETS Professional – projects can be edited on tablets and smartphones with diverse operating systems, such as, Android or Windows and on iPads. The range of ETS Inside's operational functionalities pairs perfectly with its different uses. It is possible to design and to commission small- and medium-sized projects. This complies with average KNX applications in residential, commercial and public buildings. All media (TP, IP, RF and PL) are supported.

Projects created with ETS Inside can be synchronised with ETS Professional at any time. This includes for example: extension of a KNX installation with additional devices, a topology with additional lines, or device use that requires very extensive parameterisation.



Basic principle of a decoupled user interface: intelligent and simple for settings via tablet or smartphone. Tool- and project-software are located within the ETS Inside device.

Smart – Finger tap instead of mouse click

The new ETS Inside is suited to today's commonly used, user-friendly tablets and smartphones. The new minimalistic user interface has an intelligent design and is compatible with several display resolutions, including: iPad, Android tablets and phones, Windows tablets, etc.. The flat buttons with easily understandable symbols facilitate intuitive operation. Parameterisation is a simple affair, even for mobile handhelds, because ETS Inside is touch sensitive.

Simple – A Tool for Installers and End Users

Installers and end users benefit from ETS Inside. KNX projects can be realised simply and cost-efficiently. It is also possible for the system integrator to design a project with ETS Professional and synchronise it later on with the ETS Inside device. The project is then maintained for the customer by the electrical installer responsible. The ETS Inside has another ace up its sleeve: end customers can ask their electrical installer to unblock certain parameters so that they can personally make minor modifications whenever the need arises. In that way dimming values, schedules, lighting scenes, etc. can be modified by the user according to personal preference: all without having to call a professional.

Safe – No unauthorised access

ETS Inside offers triple protection:

- To edit projects, the login data be entered in advance. This prevents unauthorised persons from gaining access to the ETS Inside device.
- ETS Inside supports the new KNX Secure, thereby making the KNX installation nearly invulnerable.

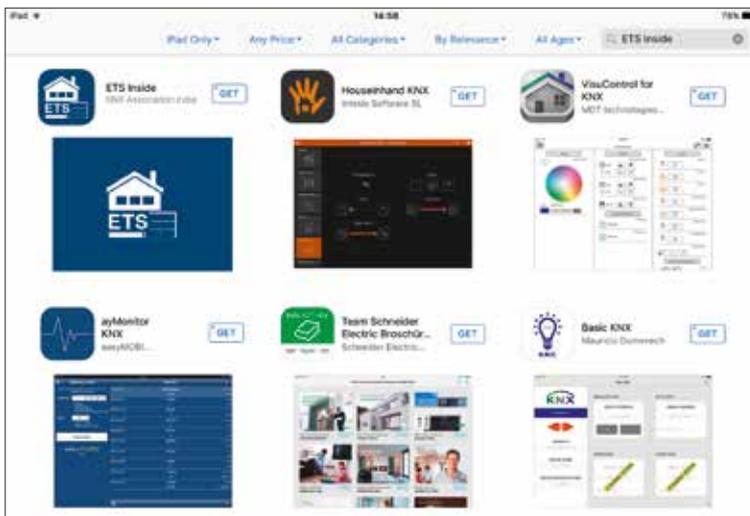
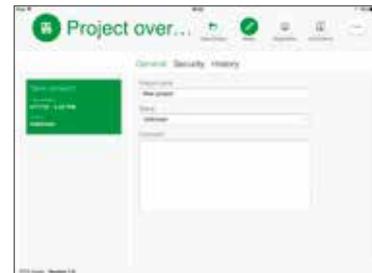
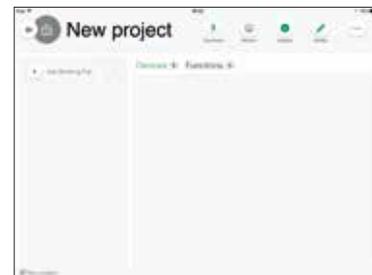
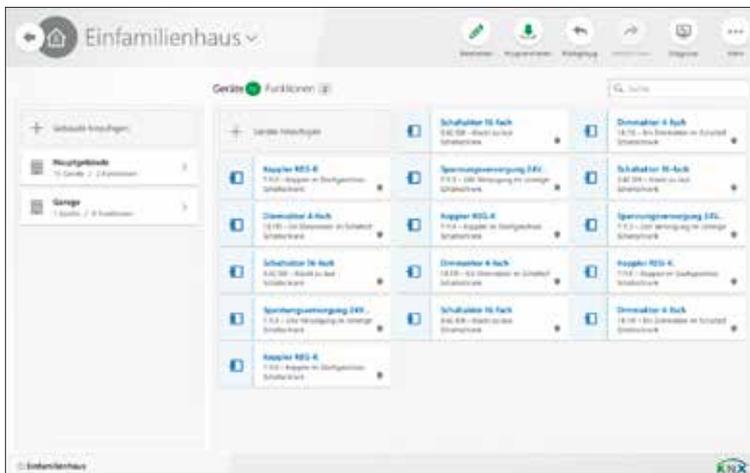
ETS Inside - Benefits

ETS stored on a KNX device - Smart, Simple, Safe

With the new ETS Inside, you now have the option of approaching KNX in a completely new and revolutionary way!

- Create KNX installations with ETS "inside" for your home/building
- Use ETS Inside on any device (tablet/smartphone/PC)
- Store your ETS "inside" in your home/building

ETS Inside allows you to create and manage KNX installations with your phone, tablet or PC. ETS Inside is the ideal tool for KNX installers, from beginners to experts. Key-features of this new KNX Association tool include smart working procedures and a simplified user interface.



Benefits

For Installers

Easier market entry

Installers can immediately get started commissioning their ETS project without extensive training. This enables more rapid market entry, especially for new KNX installers.

Reduced start-up effort

The ETS Inside is available for a fraction of the cost of a full ETS Professional licence, allowing the KNX installer to get started using KNX without high investments.

Use of regular KNX devices

All certified KNX devices¹⁾ can be configured with ETS Inside, that includes more than 8,000 available KNX certified products.

Exchange data with ETS Professional

ETS Inside projects can be fully synchronised with ETS Professional, thereby allowing further configuration on a wide range of platforms. This also makes it possible to implement more sophisticated projects with ETS Professional, while configuring them with ETS Inside.

For Users

Remote access to your installation

To facilitate control and configuration, the user is able to access the project from anywhere in the world via KNXnet/IP. Having access to the installation allows the user to get a detailed status update for each device and make modifications remotely.

ETS Inside for any device: use your own tablet / computer with iOS, Windows or Android

The ETS Inside (client) is available in all standard app stores, such as the Google Play Store, Apple App Store and Windows Store. The app is available for download free of charge.

Change individual parameters yourself

Need to make a few small adjustments to the installation? Thanks to the ETS Inside, the user now personally can make modifications to the installations. Enabled functionality makes it possible for the user to react to changes independently and right away.

Store your KNX project inside your home/building

Once an ETS Inside project has been integrated into an installation it remains part of it. Inconvenient project recoveries, reconfigurations, or lost KNX Project files are a thing of the past - ETS Inside means your project stays where it's meant to.

For Manufacturers

ETS Inside supports all certified KNX devices²⁾

ETS Professional or ETS Inside: any certified device can be configured with either tool. No gateways are needed, no new specifications have to be studied and no new product training is required. This allows KNX manufacturers to broaden their customer base even more.

ETS Inside also supports KNX Secure

Using ETS Inside also stands for implementing the highest security standards for home and building control. With ETS Inside, you are always on the safe side.



¹⁾ Plug-ins not supported by ETS Inside.

²⁾ Devices with plug-ins cannot be configured with ETS Inside.

ETS Inside – Getting Started

Get your installation up and running in 8 easy steps

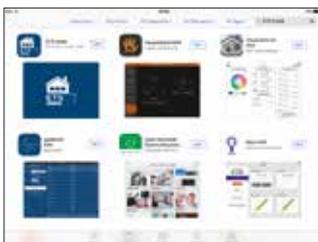
The ETS Inside is a powerful and simple tool for running your KNX installation. Simply follow the 8 steps described and give the building what it deserves – a fully functional KNX installation.

1. Integrate ETS Inside with your installation



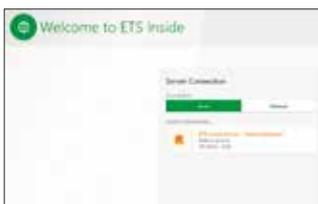
A special feature of this new tool is that ETS Inside is part of the installation. It's a tool that comes in handy for KNX devices. Simply install the KNX ETS Inside-enabled device of your choosing in your project and you are ready to start operations. Alternatively, you can use a mini-computer. Install ETS Inside on this computer and connect it to your installation via USB or KNX/IP.

2. Install the ETS Inside (client version) on your mobile phone or tablet



ETS Inside is available for Android, iOS and Windows. The ETS Inside app can be downloaded free of charge at Google Play Store, Apple App Store or the Windows Store. Once installed, you can get started with commissioning your installation.

3. Link your mobile phone or tablet to the installation using the ETS Inside device



Once you have both successfully installed your KNX installation with ETS Inside and installed your smartphone or tablet with the ETS Inside client, you can establish a connection between your mobile device and the KNX installation.

The recommended route is to:

- set the connection to Auto
- choose the project connection you would like to establish to start or continue commissioning the KNX installation

Alternatively, you can also connect to the installation manually.

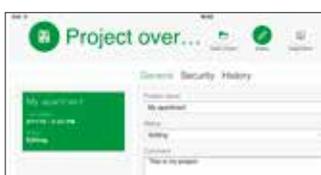
4. Set the ETS Inside password



After you have connected your mobile device with the relevant project, you will be asked to enter a password. This password secures the installation from unauthorised entry.

Once you have defined your password, you can proceed with the full commissioning of the installation without any restrictions to functionality.

5. Create your project



Give your ETS Inside project a name, choose the project's status and add comments to your project. Proceed to the Project Overview by either tapping on the highlighted project or by tapping on the "Open project" button.

Add building elements to your project – You can now proceed to add building elements to your project, such as "Cabinets", "Floors", "Corridors", "Rooms", etc.

6. Add devices from the KNX Online Catalog



Once the project and the building structure have been set, you can begin adding devices to each of your rooms. For this purpose you can use the KNX Online Catalog, which contains all ETS Inside-compatible certified KNX devices.

7. Parameterise, link and download



Since all devices have now been properly allocated, you can now get started linking channels or objects to functions. You can also use ETS Inside to adjust parameters during initial commissioning or after the project has been finalised. And once everything has been set up, you can download the settings to your KNX devices!

8. Project handover to the end user



Once done with your project, press the "Delivery" button on the project details tab. After the customer has logged in, the ETS Inside dashboard screen will be shown in "Ownership" mode and the installer password will become invalid. In ownership mode, the end user will be able to make small personal modifications, which have been enabled in advance by the installer – just one more new and revolutionary function of the ETS Inside.

Has the project been created by the end user? If so, it goes without saying that the user is free to remain in "installer" mode and make desired changes to the installation with full functionality.

ETS Inside – Special Features

8 Features that make all the difference

1. Using a mobile device for commissioning



Commissioning has never been simpler. Simply download the ETS Inside App to your smartphone or tablet and get started commissioning your KNX installation. The whole world of KNX is now available at your fingertips. The ETS Inside App is available for iOS, Android and Windows at all stores. Download the ETS Inside client, install it on your mobile device and experience KNX's full potential with just the swipe of a finger.

2. KNX devices as part of the installation



Forgot your computer, lost the project file or a dongle? Not a problem anymore. ETS Inside and the project are part of the installation. That means an end to stress and extra luggage – simply log on with your mobile device to the ETS Inside device and continue your operations.

3. Synchronising ETS Inside with ETS Professional



ETS Inside is the perfect tool for small-scale installations, such as a smart home or a small shop. However, that doesn't mean that you have to choose between either ETS Inside or the ETS Professional. Projects using either tool can be easily synchronised! Get commissioning started on your computer with ETS Professional and transfer the project to your ETS Inside – or vice versa. Configure your project's devices with your ETS Inside and take the project with you to the next installation (Quite handy for apartments with the same requirements, etc.).

4. Use ETS Inside for certified KNX devices – say goodbye to extra gateways



ETS Inside is part of the KNX installation – which means it's fully integrated with the project. The result is that any device can be configured by ETS Inside, without the hassle of installing additional plug-ins. That means zero auxiliary gateways are needed for you to bring your KNX installation to life!

5. ETS Inside comes standard with the KNX Online Catalog



ETS Inside comes with the popular KNX Online Catalog, which makes adding devices to your project simpler than ever. There's no more need for long drawn-out searches for product files – just connect to the internet and in mere seconds the information you need will be downloaded and available!

6. Remote commissioning



Are there urgent changes that need to be made to the installation or does a device need replacing while you aren't around? Thanks to the internet, remote commissioning is not a problem! One of ETS Inside's features is that it remains connected to the internet, so remote device configuration no longer requires a KNX IP Interface! This makes commissioning of KNX devices even simpler, more convenient and more reliable.

7. Freedom for the end-user



ETS Inside is not only a tool for installers, but also for the end-user. For the first time, the end-user has the option of personally configuring their enabled devices. This does away with the need to call the installer for any minor changes. Thanks to ETS Inside end-users can make changes right away.

8. Highest security standards



ETS Inside doesn't just offer password protection to prevent unauthorised access, but also supports the new KNX Secure, making the KNX installation invulnerable to any hack-attacks. Protection is based on the AES 128 international encryption standard.

Welcome to the ETS Inside Checklist

Integrating ETS Inside in your project made easy

The following steps will explain how to implement a KNX installation and enable your customers to make their own modifications.

1. Getting started with ETS Inside

Preparation is key – that is why it is important to start your ETS Inside project properly.

Did you buy a compatible mini-pc (Windows 10, see requirements) to serve as an ETS Inside Server?

Did you purchase a ETS Inside Licence at MyKNX?

Have you received the dongle associated with the licence?

As for devices, are the following issues in order?

Do you have all devices required to satisfy your customer's needs?

Have you made sure that all devices do not require additional plug-ins?

Do you need more than one line (take into consideration that coupler functions cannot be used in the ETS Inside, as it supports only one line)?

2. Integrating ETS Inside Server with your KNX Project

When you have finalised preparations, you can proceed with integrating your KNX project. In case you need any help planning and integrating your KNX project, have a look at the KNX Flyer “KNX Project Preparation”. Once you have integrated your project at the customer's property, integrate your mini-pc either via:

KNX USB Interface (Note that your mini-pc needs to have at least two USB ports – one for the ETS Inside dongle and one for the USB cable, which connects the mini-pc to the KNX installation)

KNXnet/IP

3. Downloading ETS Inside Client (free of charge)

Is integration complete and has the mini-pc with ETS Inside been added to the project? If this is the case, you can get started using the ETS Inside client for your PC, tablet or smartphone. You can download the client at the following stores:

Apple iPad: Apple App Store

Android devices: Google Play Store

Windows devices: Windows Store

4. Commissioning KNX Projects with ETS Inside

Start the ETS Inside client on your PC, tablet or smartphone and connect to the ETS Inside Server (your installation's mini-pc) and choose your password. When choosing your password check the following:

Is the password secure?

Is the password long enough?

Have you entered the password correctly (you will have to confirm your initial password)?

Note that ETS Inside has a functionality for forgotten passwords. However, this functions causes a reset of the ETS Inside Server, which results in having to commission the whole project again from scratch (if the project has not been synchronised and saved within the ETS Professional). After you have set your password, you will be redirected to the ETS Inside dashboard screen. Once commissioning is complete, unlock the functions, the customer would like to configure. For this, please check the following.

Are the enabled functions critical to the whole installation (if so, this function should not be enabled)?

Are the enabled functions set correctly?

Important: The integrator may be held liable for any malfunction of the installation, in the event that incorrect functions have been enabled for the customer.

5. Delivery to your customer

After completing your project, press the “Delivery” button on the project details tab. Check the following.

Is the customer’s password shown?

Have you handed the customer’s password to your customer?

Note that the customer’s password is different from yours. The customer will be required to change this password after logging in for the first time. Tell you customer to consider the following.

Is the password secure?

Is the password long enough?

Have you entered the password correctly (you will have to confirm your initial password)?

After the customer has logged onto ETS Inside, the ETS Inside dashboard screen will be shown in “Ownership” mode.

Note: Once installation is complete and the “Ownership” mode has been switched on, the installer’s password becomes invalid.

6. Final handover to customer

Once the project is finalised, all documents and information need to be consolidated in a folder and handed over to the customer, just as for any other KNX project. In order to make sure that the handover is complete, please check the following carefully.

Are all functions to the customer’s satisfaction?

Has the project been integrated according to the customer’s specifications (According to “KNX Project Preperation”)?)

Have you handed over the folder with all necessary documents?

Important: Compared to standard installations, the end-user has the option of making changes to the KNX installation.

Once the customer has activated the “Ownership” Mode, the customer may create an installer’s password for any additional modifications to the installation. However, this password should only be used by a professional integrator. Since the user has full access to the installation, make sure of the following.

Did you sign a maintenance contract?

Did you give the customer a full introduction to ETS Inside?

Has a signed legal disclaimer been signed by you and the customer, for in the event that the installation malfunctions as a result of the customer’s tampering?

Note that the customer must understand and sign a disclaimer stating that any modifications to the configuration while in installer mode will result in a breach of warranty, making the customer liable for the installation and any follow-up costs.

ETS Inside

Frequently asked questions 1/2

Are you new to ETS Inside or have you run into a problem?

To lend you a hand, KNX Association is pleased to present you with this list of frequently asked questions that will help you:

- ✓ Get started
- ✓ Understand the tool
- ✓ Use the tool to its full potential

1. Getting started

<i>For whom is this tool intended: The installer or the end-customer?</i>	The tool is intended for both: the installer for reasons of simplicity and, the end-customer allowing him or her to personally make minor changes to the installation.
<i>What are the minimum technical requirements for the ETS Inside server?</i>	Microsoft Windows 10, CPU: ≥ 2 GHz, RAM: ≥ 2 GB, HDD: ≥ 20 GB, RES: ≥ 1024 x 768
<i>Have you received the dongle associated with the licence?</i>	ETS Inside is suitable for residential and small commercial installations, e.g. apartments, houses, small stores, etc., which do not require a large number of devices or complexity.
<i>Do you have all devices required to satisfy your customer's needs?</i>	ETS Professional (Desktop) targets individuals with KNX experience or who are willing to take part in a certified KNX course. The ETS Professional includes the full range of functions needed for configuring and programming every type of KNX device. The ETS Inside is a version capable of handling configuration and downloads of devices for less complex installations (i. e., no plug-ins, or gateways with complex functionality).
<i>Have you made sure that all devices do not require additional plug-ins?</i>	In addition to the tool's uniqueness, it is mainly revolutionary because it makes configuration of KNX installations possible with a smartphone or tablet.
<i>Do you need more than one line (take into consideration that coupler functions cannot be used in the ETS Inside, as it supports only one line)</i>	The system integrator can now easily delegate parts of the installation's configuration directly to the customer. This allows the customer to personally make minor changes.

2. Working with ETS Inside

<i>Which devices are compatible with ETS Inside?</i>	All KNX devices that do not require a plug-in can be configured.
<i>Which product do I use to connect ETS Inside with the installation?</i>	KNX/IP interfaces, KNX/IP Routers, KNX/USB interfaces. In order to be able to use a KNX/USB interface, the device with the ETS Inside Server version installed needs to have at least two USB ports available: one for the licensing dongle and another for the connection with the installation.
<i>Can I install ETS Inside on my PC?</i>	Yes! It is possible to install it on a regular PC, but also on a mini-pc with Windows 10 installed and KNX bus connectivity (see the requirements first).
<i>How do I add ETS Inside to the installation?</i>	The ETS Inside (Server version) must be added to the installation. Once the device (e. g., mini-pc, KNX device with ETS Inside software) has been associated with your project, you can proceed with project creation.
<i>Can a KNX/IP interface and KNX/IP Router be used for configuration and download of an installation with ETS Inside?</i>	Yes, USB connections are also accepted.
<i>What is the maximum number of devices that can be configured with ETS Inside?</i>	ETS Inside can create and configure projects for up to 255 KNX devices.
<i>Where can I download the ETS Inside client?</i>	At the Apple App Store, Google Play Store and Windows Store. ETS Inside clients can be downloaded free of charge.
<i>Can I configure several projects with one ETS Inside client?</i>	Yes, the ETS Inside client allows you to configure as many projects as you like.
<i>Can I configure several projects with a single version of ETS Inside Server?</i>	No, ETS Inside Server can only handle one project.
<i>If I create a project with ETS Inside, where is it stored?</i>	It is stored on the mini-pc installed with the ETS Inside Server.
<i>If my project contains devices that use plug-ins will I be able to import it?</i>	Yes! However, it will not be possible to configure those devices with the ETS Inside.
<i>Can projects from ETS Professional be synchronised with ETS Inside?</i>	Not on the release date; however, in the near future this functionality will be enabled in one of the first mandatory updates for the ETS Professional version.
<i>How can I license my ETS Inside?</i>	You need to buy an ETS Inside (server version) licence at MyKNX and use it with dongle.
<i>How much does an ETS Inside licence cost?</i>	It costs €160,-, including dongle.
<i>Will it be possible to update ETS Inside?</i>	Yes, however, the mini-pc installed with ETS Inside will need an active internet connection to carry out updates.

ETS Inside

Frequently asked questions 2/2

<i>Is an internet connection for my project always necessary for ETS Inside to work?</i>	No, internet connection is not necessary. You only need an internet connection for downloading updates for your present version of ETS Inside.
<i>Can I transfer the mini-pc with the ETS Inside to another installation?</i>	Yes, you can, but keep in mind that ETS Inside can handle only one project, so it will be necessary to export your project to a safe location (or synchronise with ETS Professional), delete the old project from ETS Inside and then create a new project.
<i>Is it possible for me as a home owner to have ETS Inside installed in my home (installed with KNX) and have this automatically synchronised?</i>	In order to synchronise your ETS Inside software with your current home configuration, you will need to request an initial synchronisation by your KNX integrator. Afterward it will remain available to your ETS Inside software.
<i>Why should an integrator allow the end user to make changes?</i>	Homeowners in particular show a strong interest in having control over functions that support frequent change. In order for the homeowner to have access to basic functions, the system integrator can enable options modification.

3. FAQs for Manufacturers

<i>I am a KNX Manufacturer and I would like to offer an ETS Inside device. How do I do that?</i>	As a KNX Manufacturer you can get a special version of the ETS Inside software that can be installed on your device(s). A web server does not need to be installed.
<i>I am a KNX Manufacturer and I already have a non-certified gateway, in which I would like to integrate ETS Inside. Am I allowed to do so?</i>	Yes
<i>I am a KNX Manufacturer and have already a device for visualisation and KNX/IP integration in my portfolio. Will I be able to integrate this with ETS Inside and sell it?</i>	Yes, provided your device runs on Windows 10 and has a USB slot available (for licensing purposes).
<i>I am a KNX Manufacturer and I would like to integrate ETS Inside in one of my certified devices. Do I need to have them re-certified or pass a special certification?</i>	No, you do not need to have them re-certified if you do not modify the Application Program of the standard KNX functionality. Integrating the ETS Inside does not require additional certification, as it does not impact the device's standard KNX functionality.
<i>I am a KNX Manufacturer and I would like to offer an ETS Inside device. May I also sell ETS Inside licences?</i>	No, according to the licensing agreement, you are not entitled to resell ETS Inside licences. These must be purchased via MyKNX.



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