



APRIL 2019

Webinar “ABB-Welcome IP”

Competence Center Europe – Smart Buildings

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Agenda

Introduction, overview and target groups

Core category and services

Portfolio

Planning and Topology

Special functions



Access all possibilities

Introduction

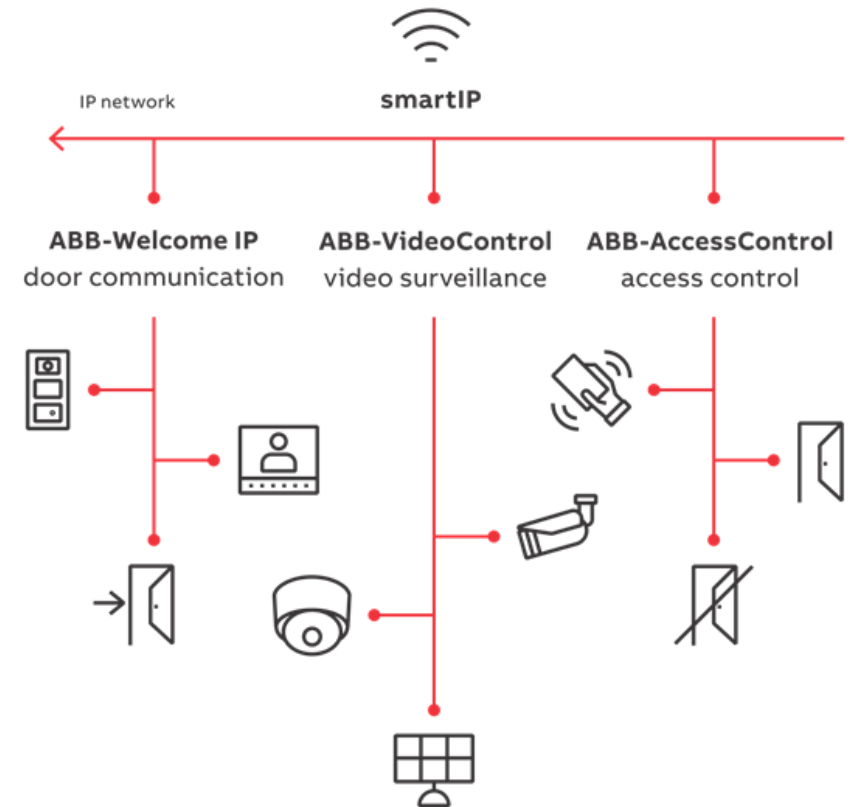
Access all possibilities

Connecting to a smarter life

Overview

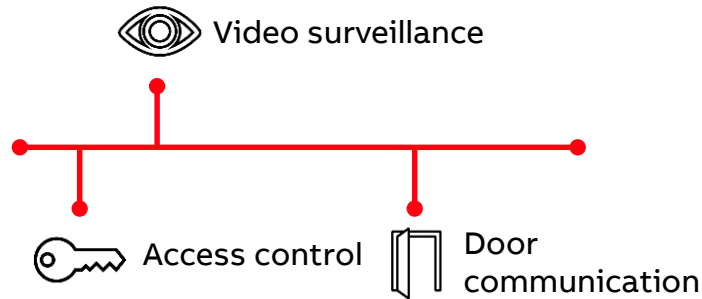
The IP connectivity provides you a customized and smarter choice, regardless of the size and distance.

The connectivity brings all systems together to create a **smartIP ecosystem** for a holistic building automation solution in commercial, public and residential buildings.



Access all possibilities

Connecting to a smarter life



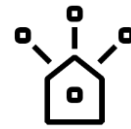
...IP platform for a complete building automation solution...



Simplicity

...easy to use & to commission...

...interaction between door entry, access control, surveillance, KNX, free@home...



Flexibility

... in esthetic modern design...



Design

Access all possibilities

Connecting to a smarter life



High-end
residential



Multi
Apartment



Mid-size
Commercial

...scalable solution for
residential and
commercial...



MyBuildings portal
powered by ABB Ability™

... cloud connected...

... safer and smarter...



Cyber Security

...open for 3rd party customization
and new business models...



3rd party API and SDK

Access all possibilities

Main segments

High-end residential homes



Multi Apartments Buildings



Mid-size commercial Buildings





Access all possibilities

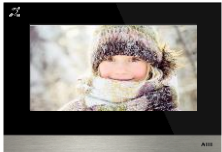
Core category and services

Access all possibilities

Core category

Door communication

- 5 types of outdoor stations with white and stainless steel color
- 3 types of 7“ panels with white and black color
- 3 color of end strip



Video surveillance

- 2 types of dome cameras
- 2 types of bullet cameras
- NVR



Access control

- 2 types of cylinders with US standard
- 2 types of cylinders with DE standard
- 2 types of cylinders with CH standard
- 1 type of cylinder with Scandinavian standard



Access all possibilities

Core services around via MyBuildings portal

Door communication

Remote control and push notifications



Video surveillance

Online storage for video streams



Access control

Remote access control via mobile





Portfolio

ABB-Welcome IP - Door communication

Smart Access Point Lite



Core features:

- Commissioning the system
- Provides an own Wi-Fi network
- Web-based software on board
- Allows the access via PC or smart devices into the project and the remote control
- Comfortable changes afterwards

Access all possibilities

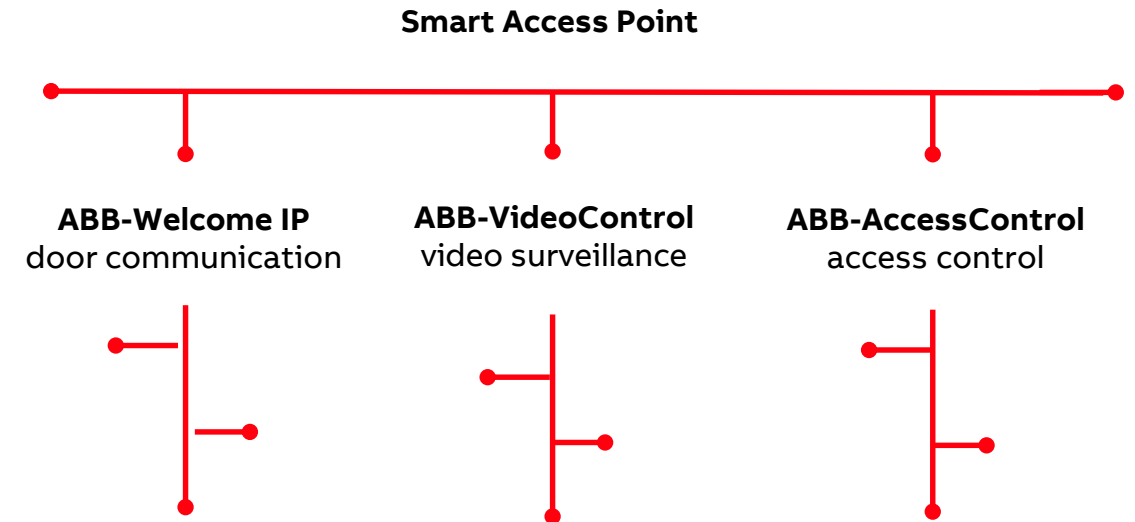
Interaction of Smart Access Point

Buildings

With the help of a Smart Access Point, your home or buildings can realize interaction function among different systems

Responsible for:

- Commissioning
- Main system settings
- Firmware updates
- Device Management (adding, changing,...)
- User Management
- Notifications



IP Touch 7



BUSCH-JAEGER



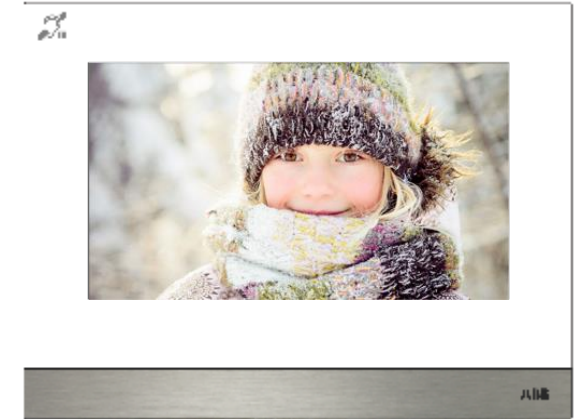
BUSCH-JAEGER

Product portfolio

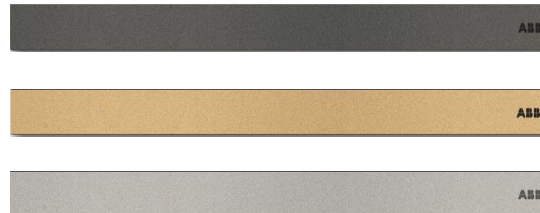
IP touch Panel overview

7 inch IP touch Panel

- Black and White color IP touch panel
- Three types includes LAN + Wi-Fi, Double LAN, single LAN
- Three colorful metal end strip for option, include silver, gold and Anthracite.
- Intuitive GUI on sliding screen with high resolution 1024*600
- Slim thickness with 7.8 mm when flush mounted
- Central control panel for DES, CCTV, AC and Home automation
- PoE and local power supplier for option



Black and White IP touch panel



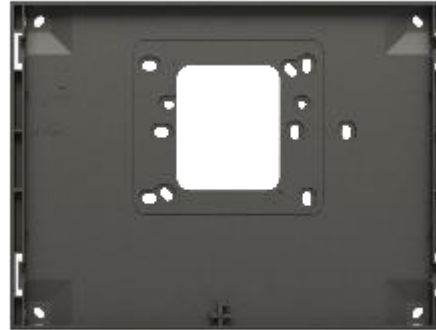
3 colorful metal end strip for option

Product portfolio

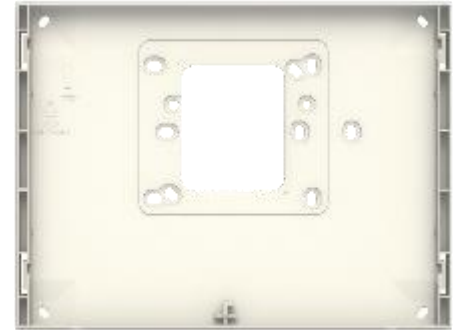
System accessories overview

Installation box

- Surface mounting box for IP touch 7
- Flush mounting box for IP touch 7
- Black & white



Surface mounting box -Black

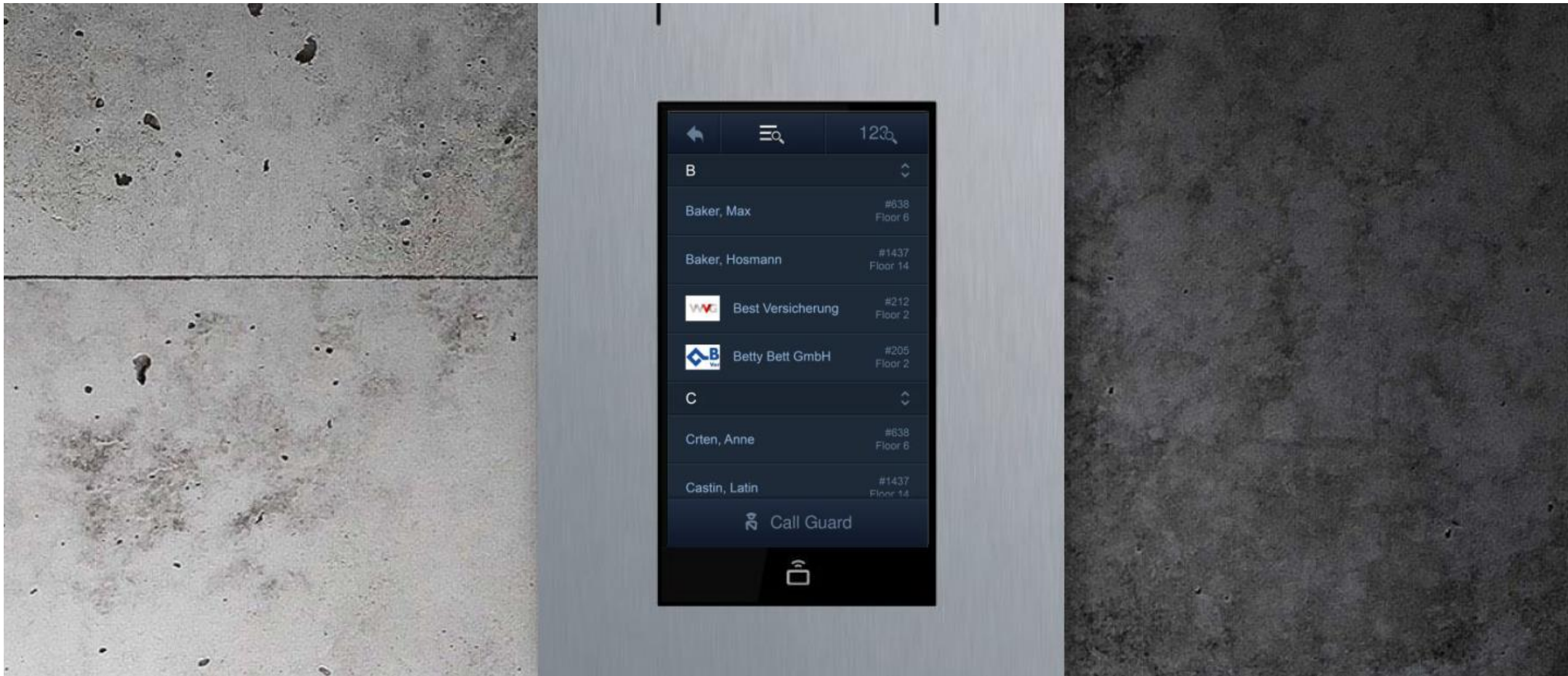


Surface mounting box -White



Flush mounting box -Black

Outdoor Station Video, **touch 5"**



Technical detail for individual devices

Touch 5" Outdoor Station

Top feature

- HD video streaming(720P) with 130 degree angle
- Super anti-fog coating and in-built heater
- Automatic day to night mode switchover
- LED indicator for real-time status
- Light-strong 5 inch touch screen with resolution 480*800
- Capacitive touch screen with Virtual keypad and RFID-reader (MIFARE® DESFire®) integrated
- Bulletin & advertisement via 5 inch screen
- Name list / physical address / logical address calling type
- Suitable for the disabled with induction loop
- Modular design makes installation as easy as 1-2-3
- Clean design with thin installation in both flush and surface mounting
- Power supply via PoE
- IP54, vandal proof IK 07



5 inch touch screen with high resolution

Technical detail for individual devices

Keypad Outdoor Station

Top feature

- HD video streaming(720P) with 130 degree angle
- Super anti-fog coating and in-built heater
- Automatic day to night mode switchover
- LED indicator for real-time status
- Opening of the door by encrypted IC card or ID card
- Suitable for the disabled with induction loop
- Modular design makes installation as easy as 1-2-3
- Clean design with thin installation in both flush and surface mounting
- Power supply via PoE
- IP54, vandal proof IK 07



Keypad outdoor station with IC & ID card reader

Technical detail for individual devices

Round/Bar pushbutton Outdoor Station

Top feature

- HD video streaming(720P) with 130 degree angle
- Super anti-fog coating and in-built heater
- Automatic day to night mode switchover
- LED indicator for real-time status
- Bar and around pushbutton for optional
- Bright back-lit ensures clear nameplate at night time
- Opening of the door by encrypted IC card and NFC (for round pushbutton outdoor station only)
- Pushbutton could be programmed as you want (switch on lighting, call indoor station or guard unit)
- Suitable for the disabled with induction loop
- Modular design makes installation as easy as 1-2-3
- Clean design with thin installation in both flush and surface mounting
- Power supply via PoE
- IP54, vandal proof IK 07



Round/Bar pushbutton outdoor station

Product portfolio

Outdoor station overview

Functional module

- A/V module
- Touch 5” module, integrate with display and keypad
- Bar 3 and 4 rows pushbutton module
- Round 1/2/3 pushbutton module with/without card reader(DESfire/IC)
- Keypad with stainless steel and white color
- Display with DESfire/IC/ID card reader



Touch 5” module



Round 1 pushbutton



Round 2 pushbutton



Round 3 pushbutton



Round 1 pushbutton
With card reader



Round 2 pushbutton
With card reader



Round 3 pushbutton
With card reader



Bar 3 row pushbutton



Bar 4 row pushbutton



Display IC/ID module



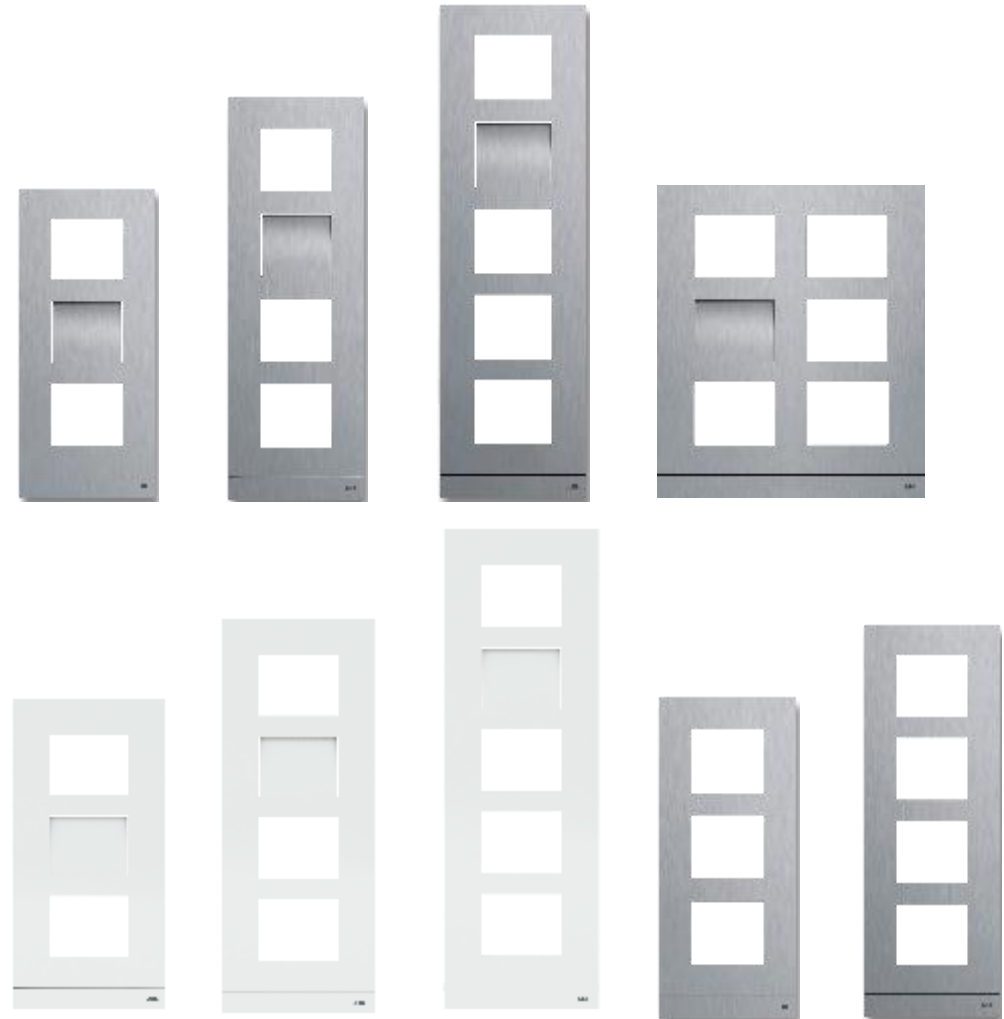
Keypad module

Product portfolio

System accessories overview

Stainless steel frame

- Size 1/3/4/5, 2/3 outdoor station cover frame
- Colors: Stainless steel and white
- Without AV cover frame, size 1/3 & 1/4

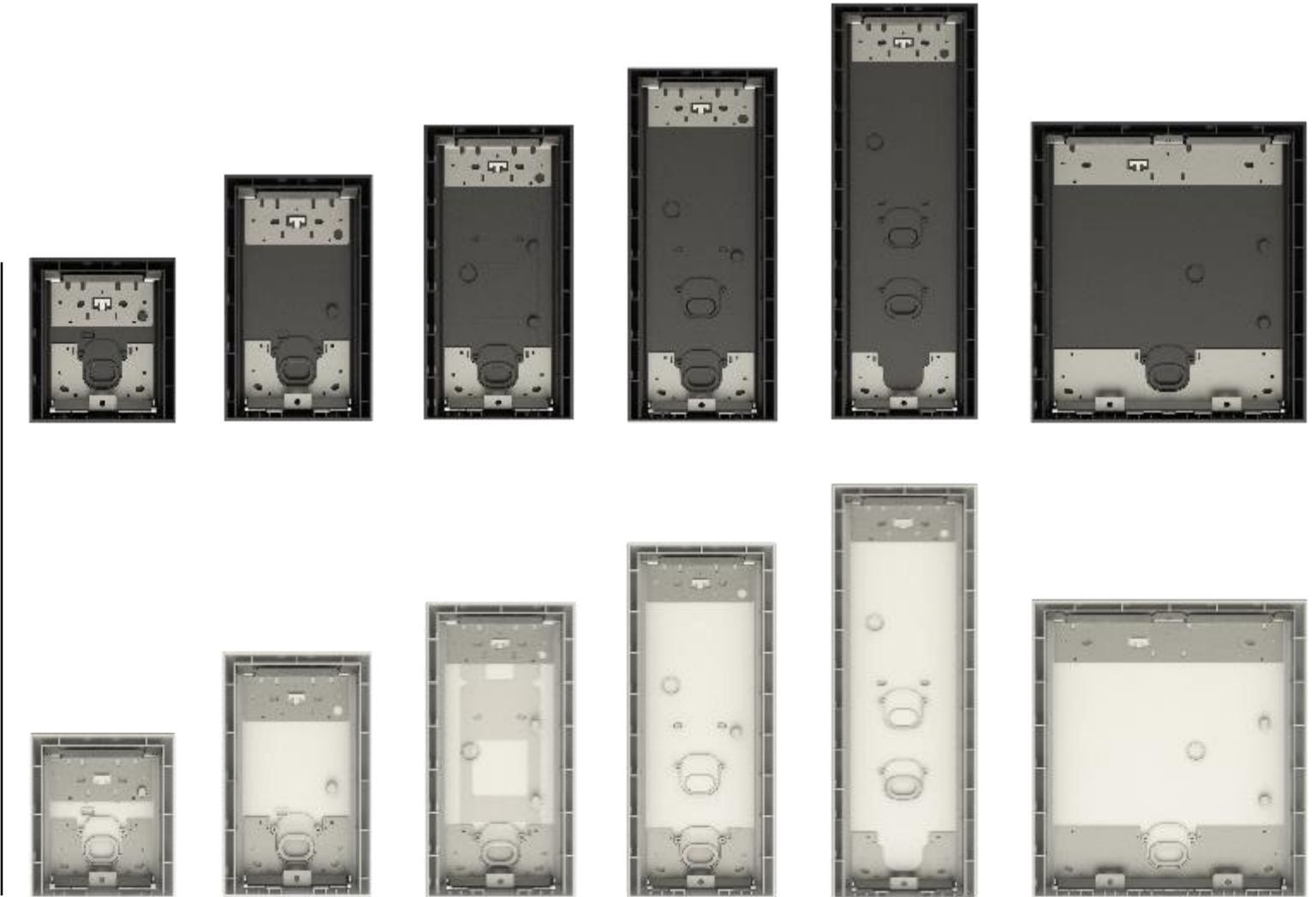


Product portfolio

System accessories overview

Installation box

- Surface mounting box, size 1/3, size 1/4, size 1/5, size 2/3
- Black and grey color for option

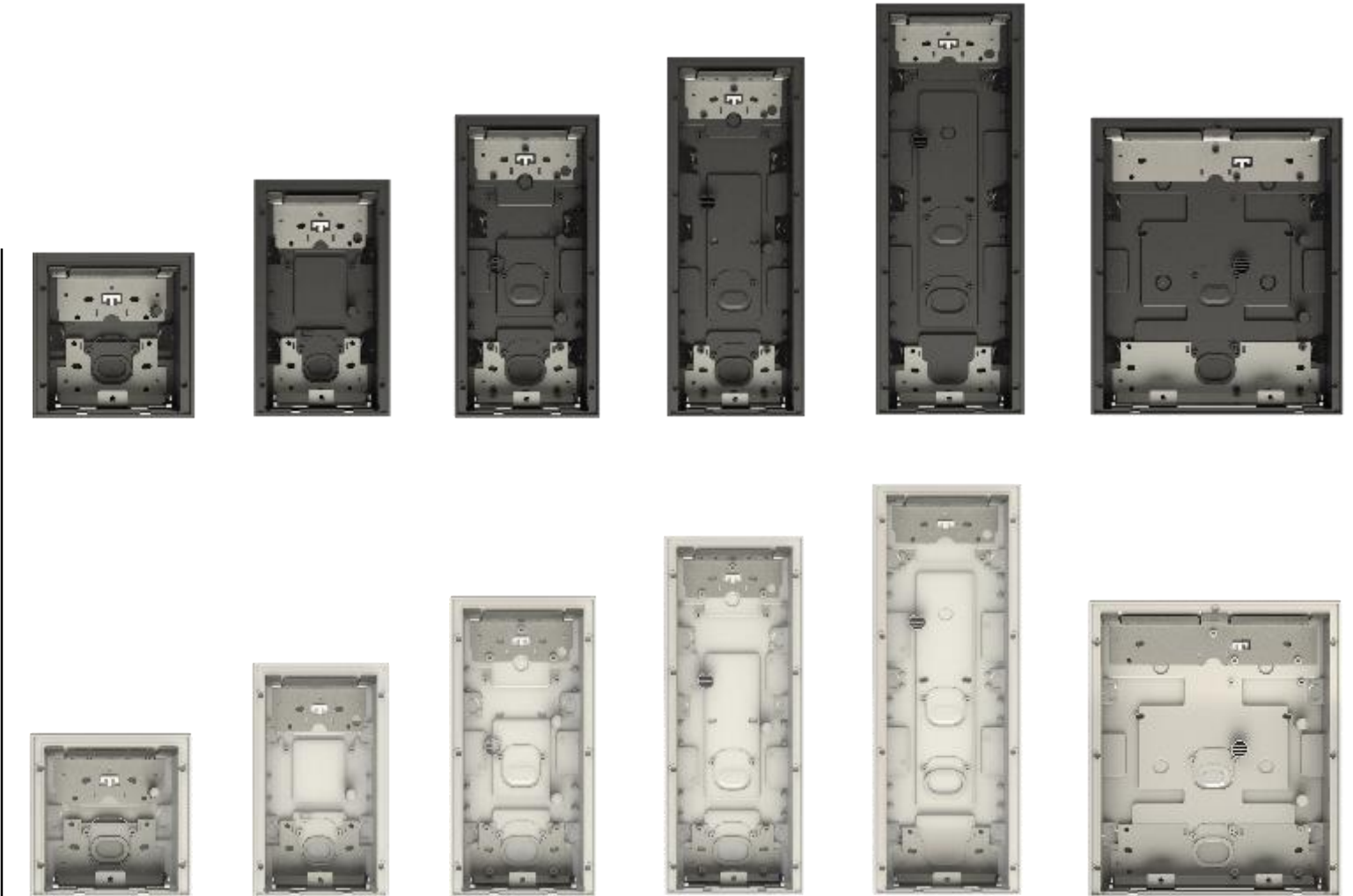


Product portfolio

System accessories overview

Installation box

- Flush mounting box, size 1/3, size 1/4, size 1/5, size 2/3
- Black and grey color for option



Technical detail for individual devices

Guard Unit

Top feature

- Convenient switching functions
- Holding conversation participants (Music-On-Hold)
- Call lists
- Support for monitoring outstations or IP cameras
- Support for the release of all doors or special doors in an emergency
- Receive the alarm and the emergency call (SOS) from the IP Touch Panel
- Wall or table mounting possible
- Power consumption: PoE class 3
- Operating voltage: PoE according to 802.3af
- Dimensions: 265 x 165 x 117 mm (LxWxH)



Technical detail for individual devices

IP Actuator

Top feature

- For connecting electrical door opener or light
- Up to two electrical door opener connections
- The switching duration of opening the door or switch on lighting is adjustable
- Setting via IP touch panel or PC management software
- DIN Rail mounted
- Remote firmware update
- PoE or local power supplier for option



IP Actuator

Product portfolio

System devices overview

Power Supply

- Power supply with DIN-Rail mounting
- Power adaptor with EU, CN, US, UK standard



Power supply



Power adaptor



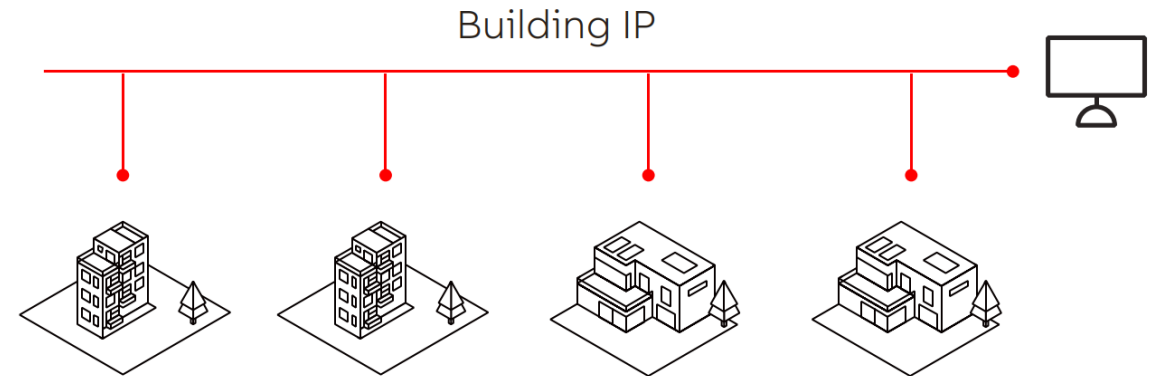
Planning and Topology

Door Communication

ABB-Welcome IP

Dimension

- Up to **900 buildings** in one system
- Up to **2,000 apartments** per building
- Up to **64 outdoor stations** per building
- Up to **64 guard units** per building
- Up to **64 second confirmed outdoor stations** per apartment
- Up to **8 indoor stations** per apartment



Welcome IP

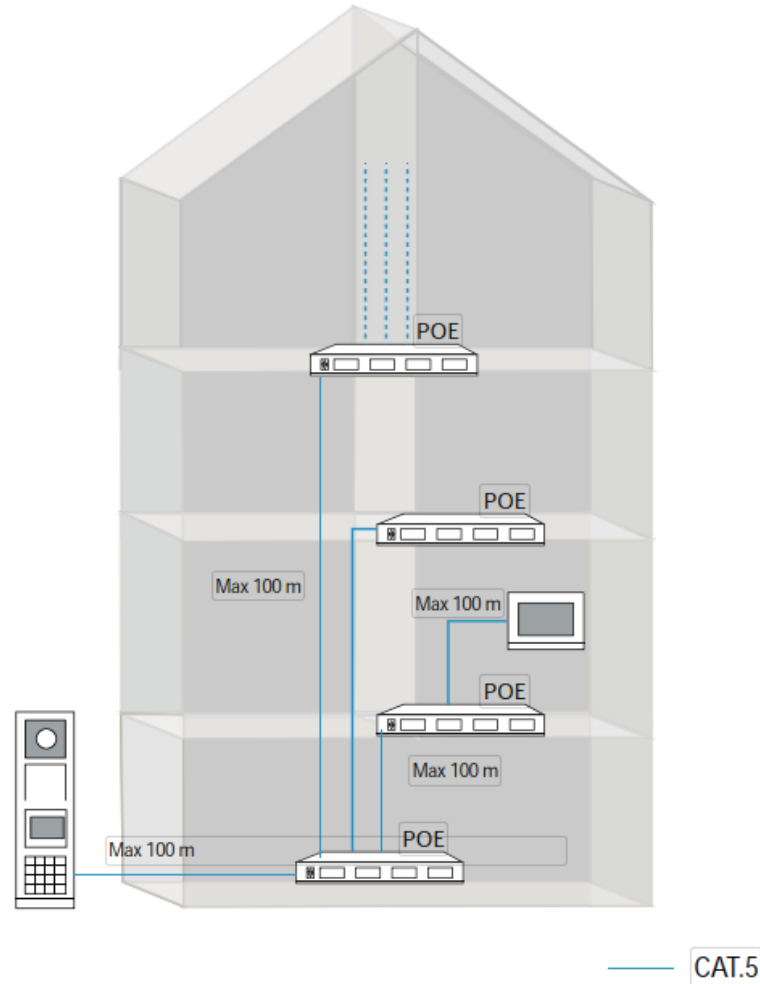
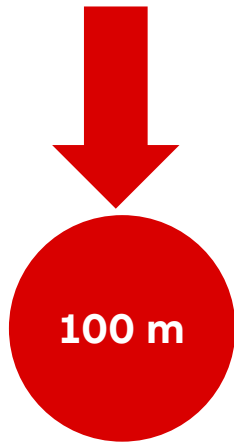
Environment specifications

- Own physical network or VLAN with Quality of Service
- Design of the active network components in Ethernet technology
- Minimum requirement of the network: 100Base Tx
- Consistently multicast network
- Structured cabling according to ISO/IEC 11801:2002 or DIN EN 50173-1/2/3/4
- Wiring at least Cat. 5/5e
- For the primary cabling / building cabling fiber optic connections
- The use of Level 3 or Level 2 switches is required
- No DHCP support

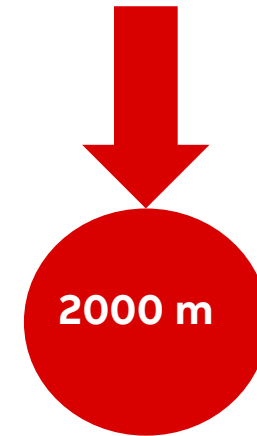
Planning

Distance rule

LAN cable
(Cat5E, Cat6, Cat7, ...)



Fiber-optic



Welcome IP

PoE Switch

- Needed PoE standard: **802.3af(-2003)**
- 15,4 W per port → enough to power all Welcome IP devices





Commissioning

Door Communication

Typical Example No.1

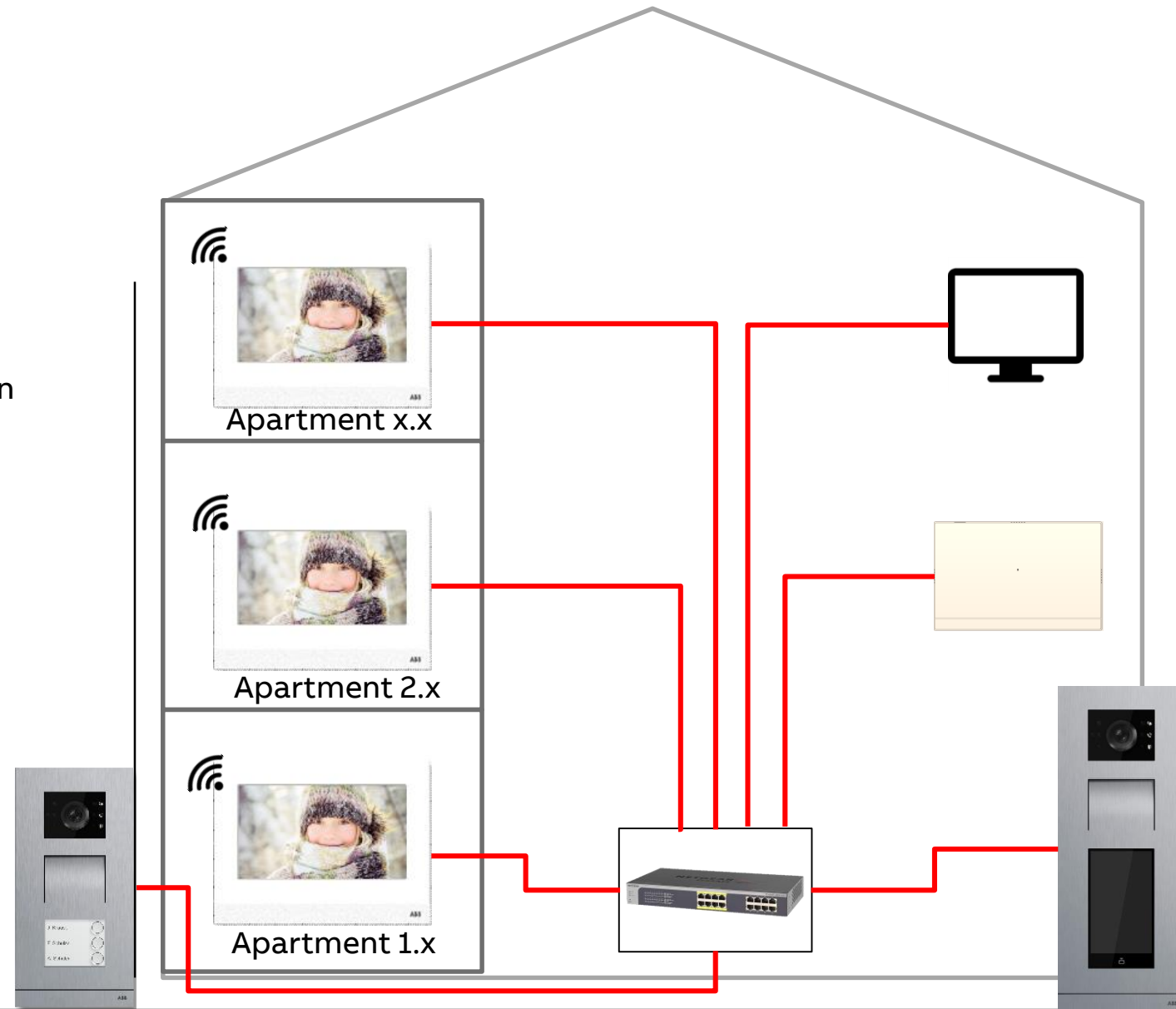
Multi-Family House with X apartments

Requirements:

There are 3 flats in one house:
Each flat is on one floor and has its own video indoor station

Devices:

- 1 x 5" outdoor station
- 1 x Outdoor station with push buttons
- 3 x Touch panels (LAN + Wi-Fi)
- 1 x Smart Access Point Lite
- 1 x PoE switch



Typical Example No.1

Multi-Family House with X apartments

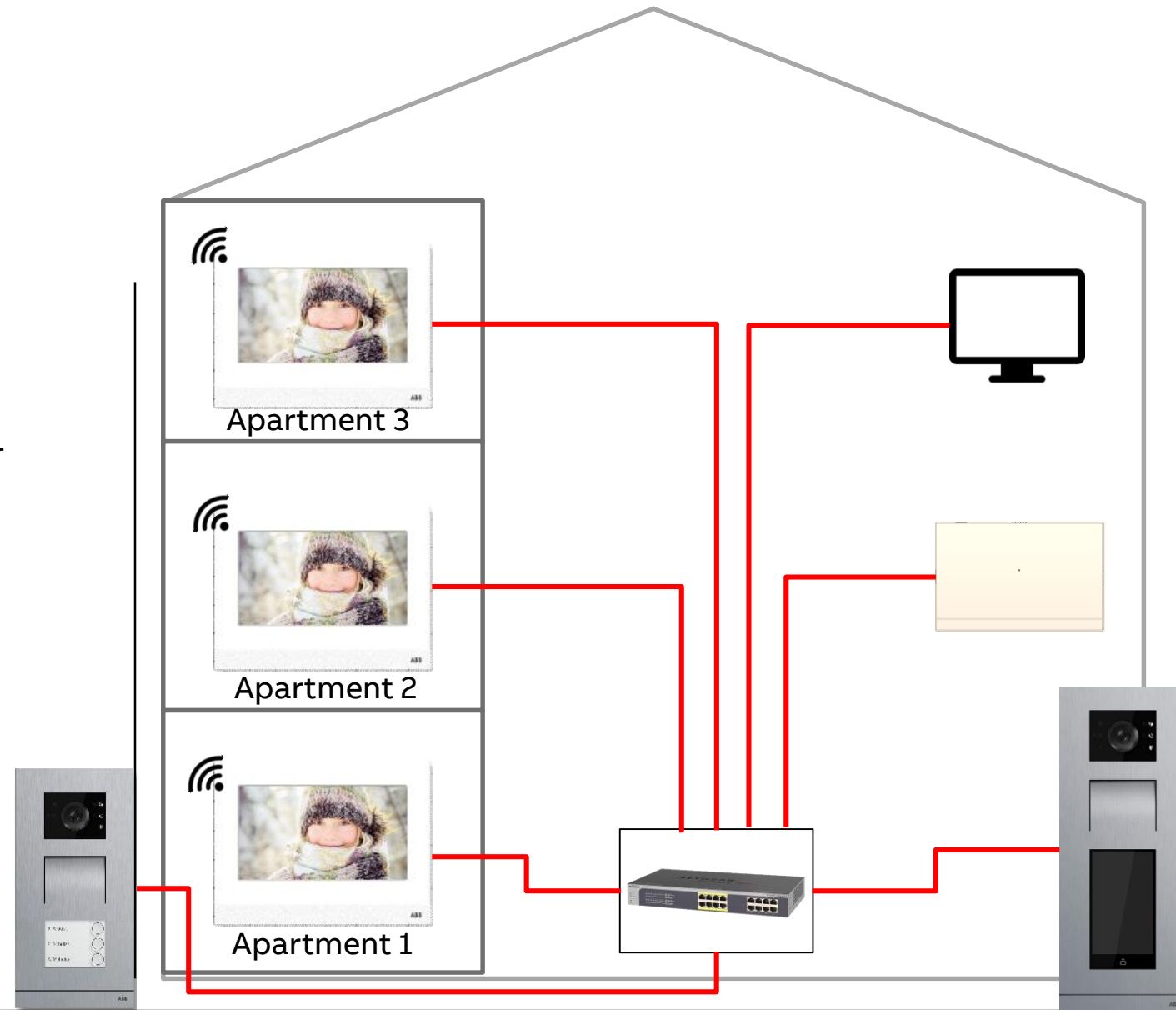
1. Step:

Connecting all devices

Depending on building size use one or more PoE switches

Attention: Make sure, that every indoor station and outdoor station has an individual address

→ Change address locally with 7" Panel



Typical Example No.1

Local settings

1. Step:

Engineering settings on device (7" Panel)

Enter engineering pwd.

| | | |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |
| | 0 | |

X OK

Engineering settings

Engineering settings

| | |
|--------------------------|--------------------|
| Local settings | Call mode |
| Outdoor station settings | Physical address ▼ |
| IP actuator settings | Mode select |
| Smart home settings | Master mode ▼ |
| Password management | Block no. Room no. |
| | 001 0101 |
| | Device no. |

Tu 24/07/18 17:18

Typical Example No.1

Local settings



1. Step:

Power on the outdoor station, wait a while until all 3 LED indicators go out. Hold the first button on the outdoor station for 10 s until all 3 LED indicators start to flash.

Enter engineering pwd.

| | | |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |
| | 0 | |

✕ OK

Engineering settings

Engineering settings

| Local settings | Device settings |
|--------------------------|-------------------|
| Outdoor station settings | Device type GS |
| IP actuator settings | Device no. 01 |
| Smart home settings | |
| Engineering password | Lock management |

Mo 23/07/18 04:26

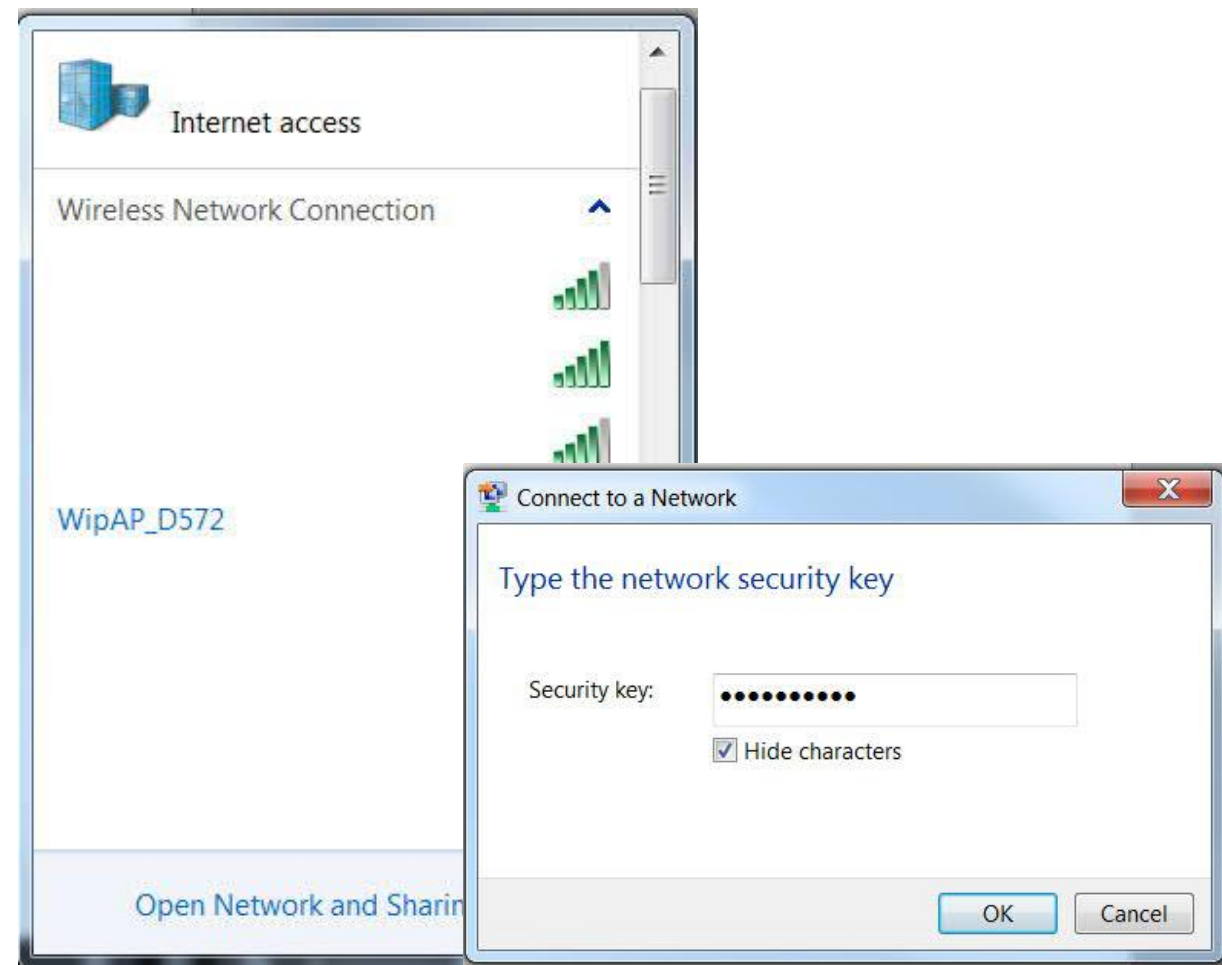
Typical Example No.1

Smart Access Point Lite – Commissioning

2. Step:

Connect to the SAPLite

If Smart Access Point is running in Access Point mode, there is a Wi-Fi name of Smart Access Point (e.g. WipAP_xxx). Click this and enter the security key to connect (the security key can be found on the label affixed to the device).

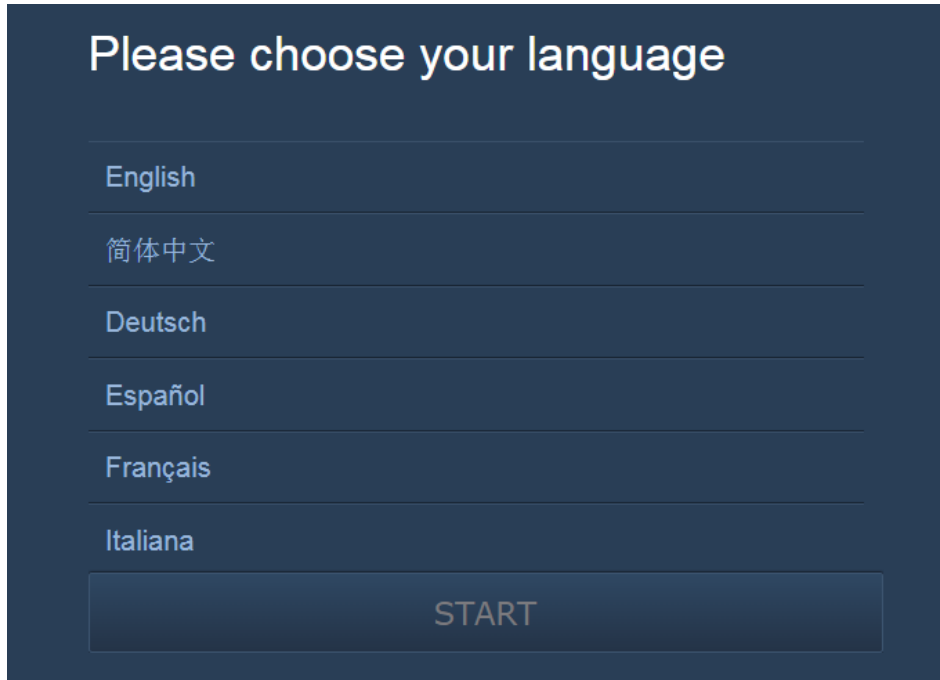


Typical Example No.1

Smart Access Point Lite – Commissioning

3. Step:

Commissioning the SAPLite



Please choose your language

English

简体中文

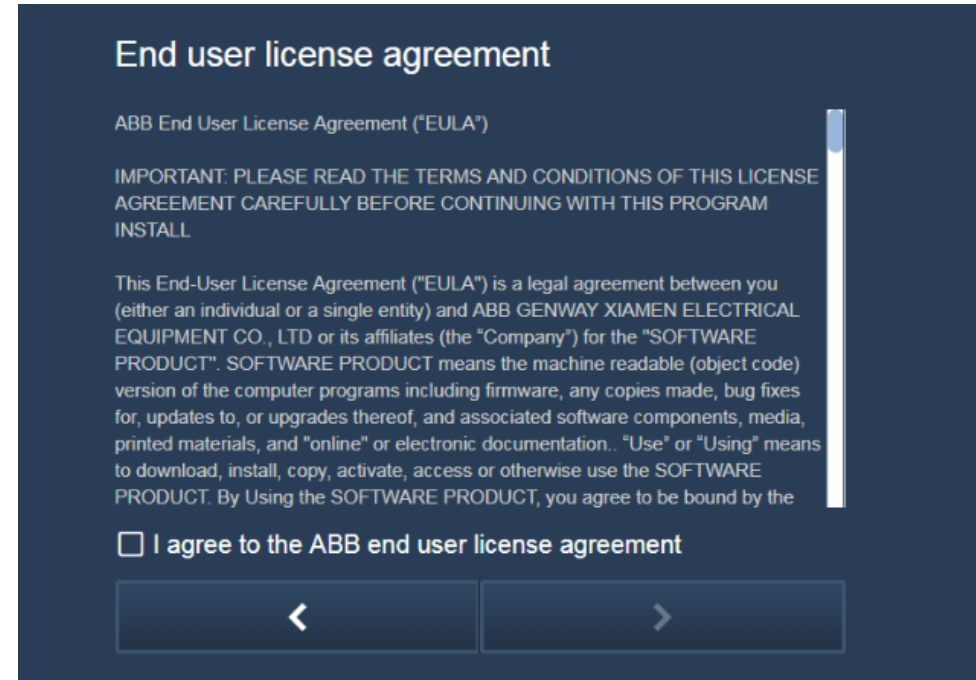
Deutsch

Español

Français

Italiana

START



End user license agreement

ABB End User License Agreement ("EULA")

IMPORTANT: PLEASE READ THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT CAREFULLY BEFORE CONTINUING WITH THIS PROGRAM INSTALL

This End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and ABB GENWAY XIAMEN ELECTRICAL EQUIPMENT CO., LTD or its affiliates (the "Company") for the "SOFTWARE PRODUCT". SOFTWARE PRODUCT means the machine readable (object code) version of the computer programs including firmware, any copies made, bug fixes for, updates to, or upgrades thereof, and associated software components, media, printed materials, and "online" or electronic documentation. "Use" or "Using" means to download, install, copy, activate, access or otherwise use the SOFTWARE PRODUCT. By Using the SOFTWARE PRODUCT, you agree to be bound by the

☐ I agree to the ABB end user license agreement

< >

Typical Example No.1

Smart Access Point Lite – Commissioning

3. Step:

Commissioning the SAPLite

Please create your account

Username

Password

Confirm

< >

Please choose your building type

☒ Residential

☐ Functional

< >

Typical Example No.1

Smart Access Point Lite – Commissioning

3. Step:

Commissioning the SAPLite

Thank you

| | |
|---------------|------------|
| language | English |
| User name | Installer |
| Building Type | Functional |

< Finish

Information

⚠ Successful Installation. You may need to access new network address due to network address changed.

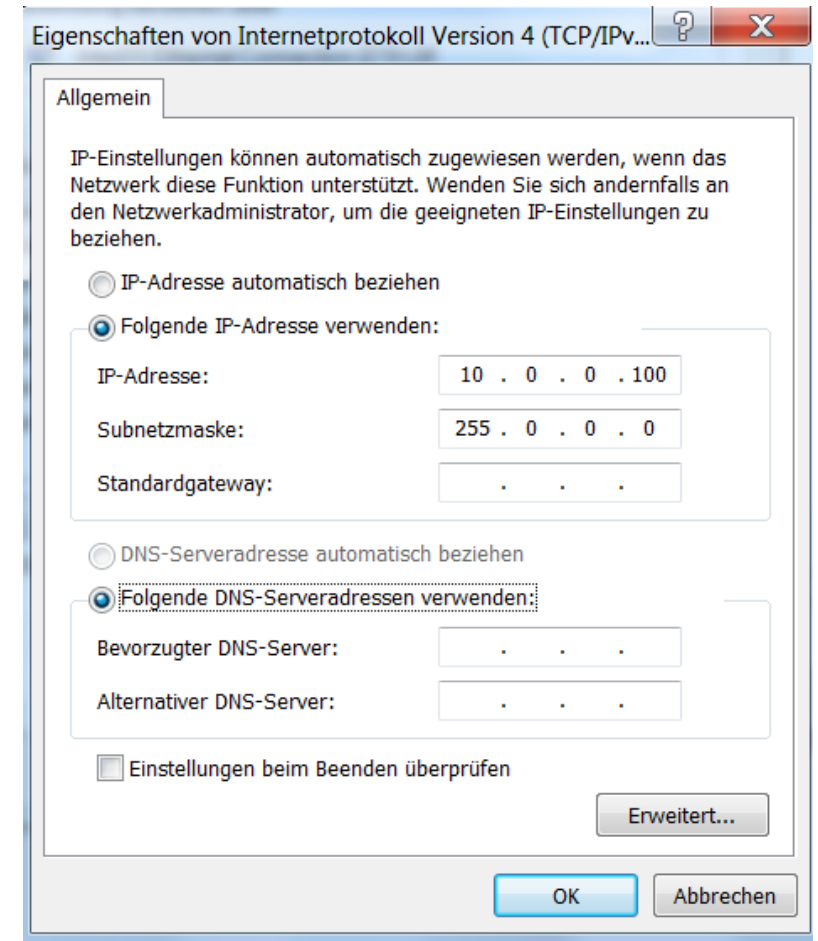
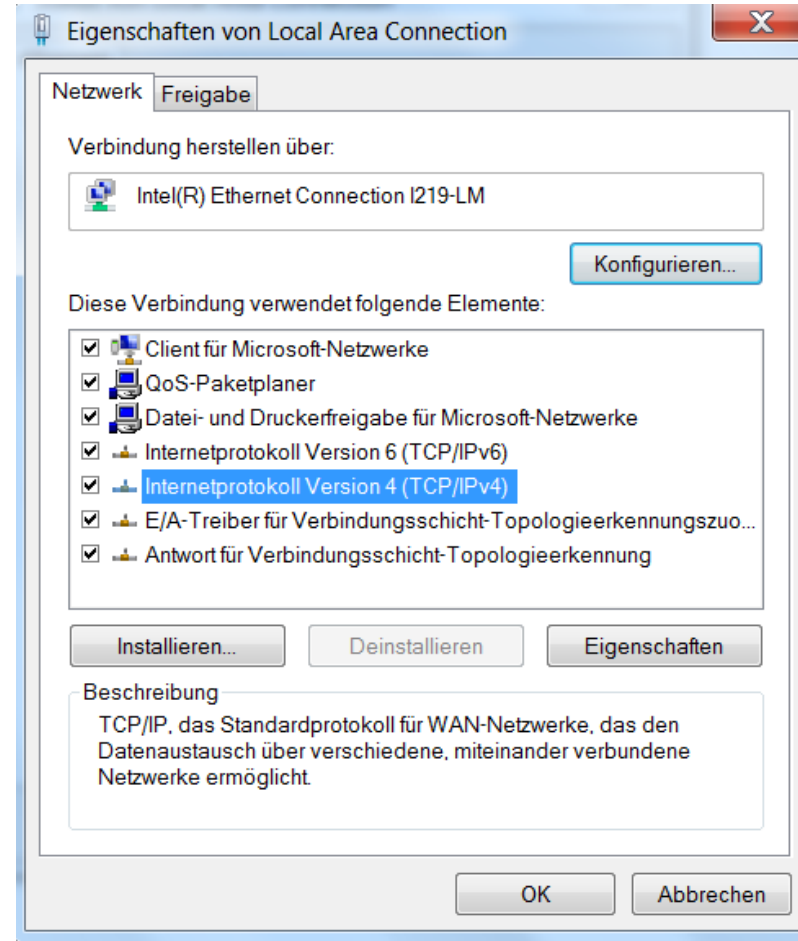
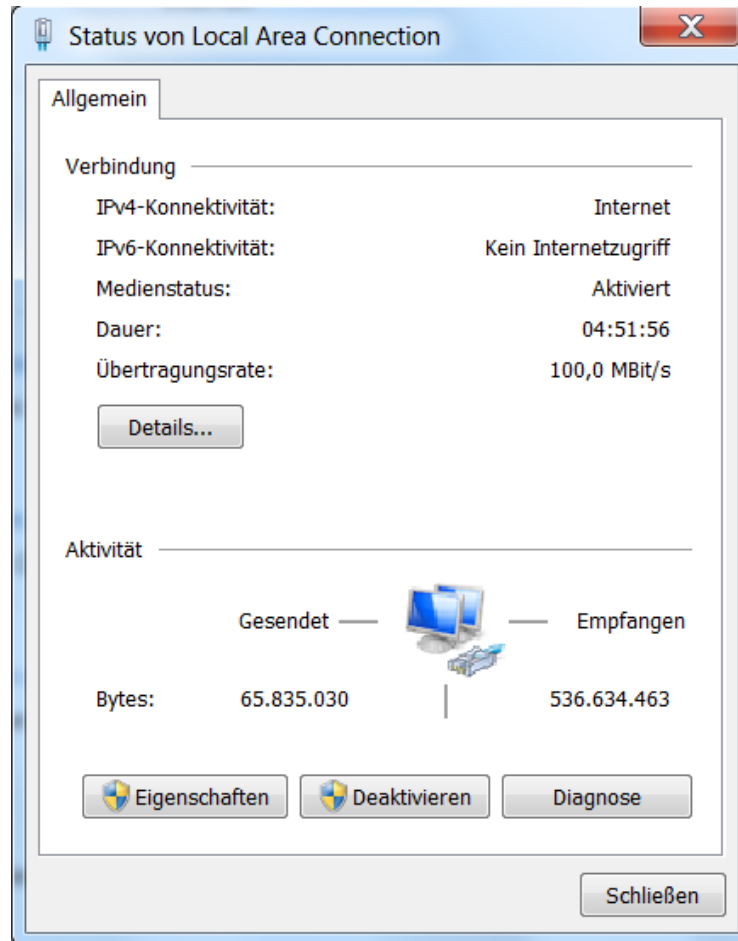
✓

PcManagement x +

← → ↻ ⓘ Nicht sicher | 10.0.0.1/#

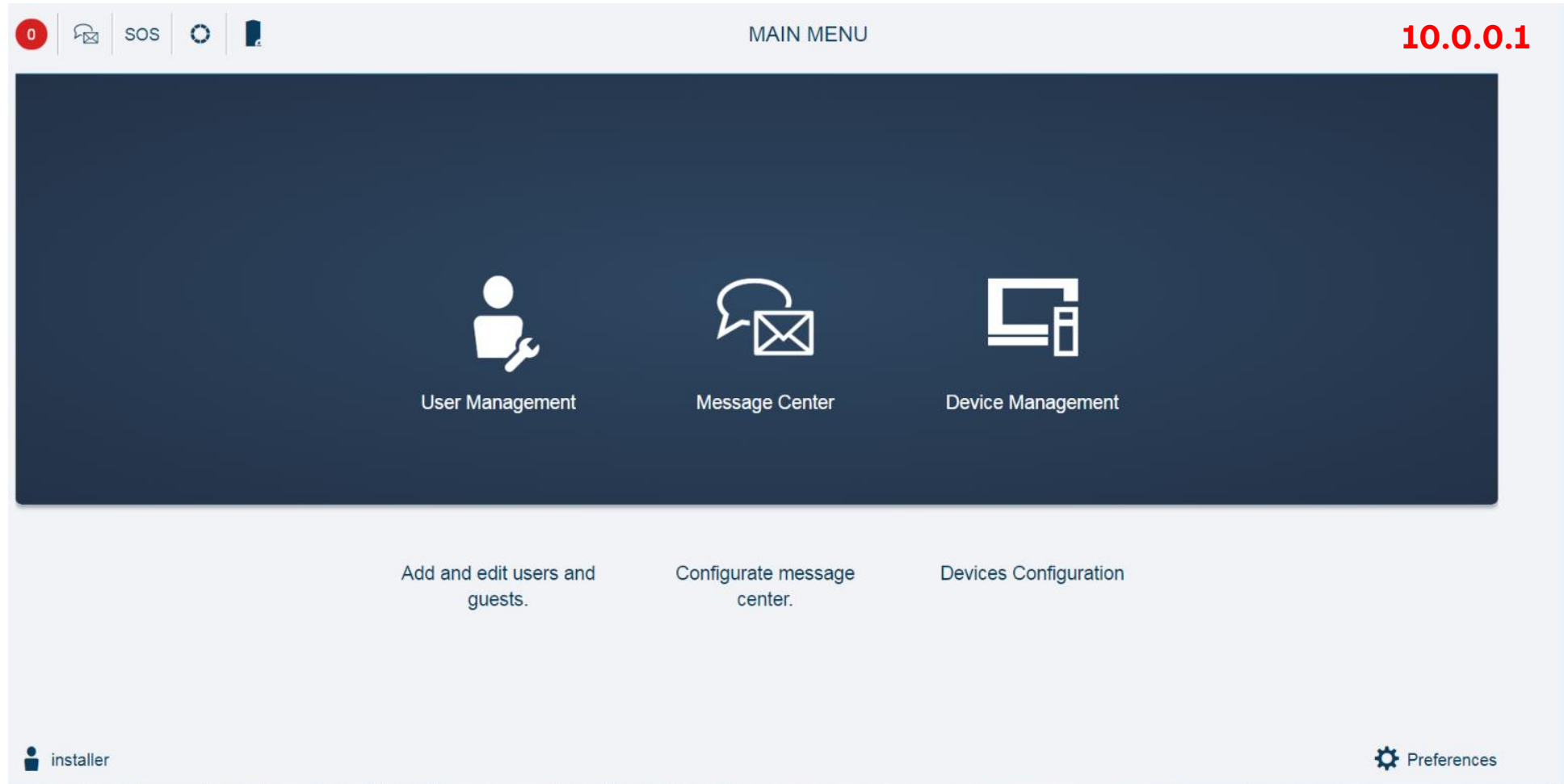
Typical Example No.1

Network settings



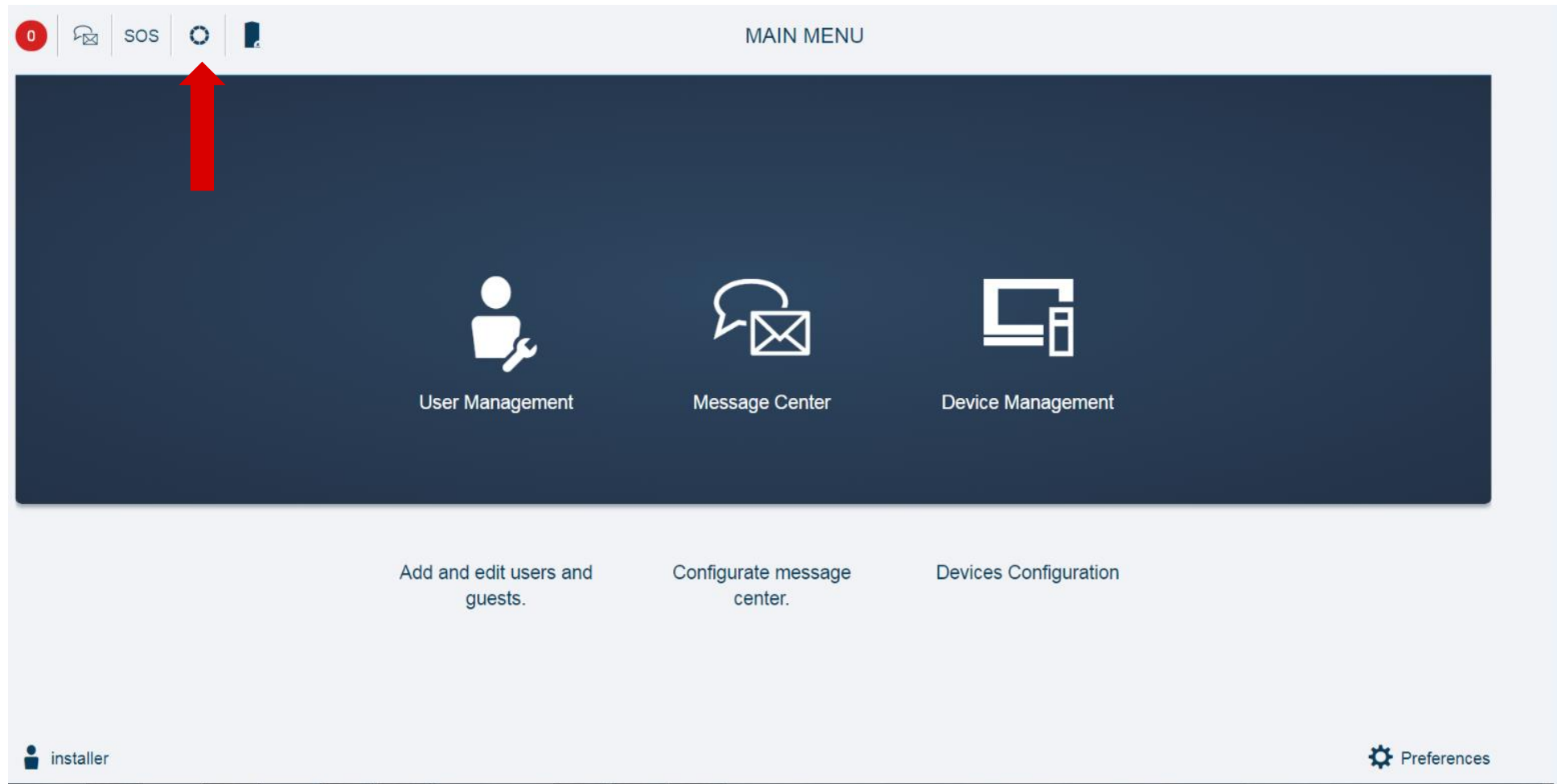
Typical Example No.1

Smart Access Point Lite – Commissioning



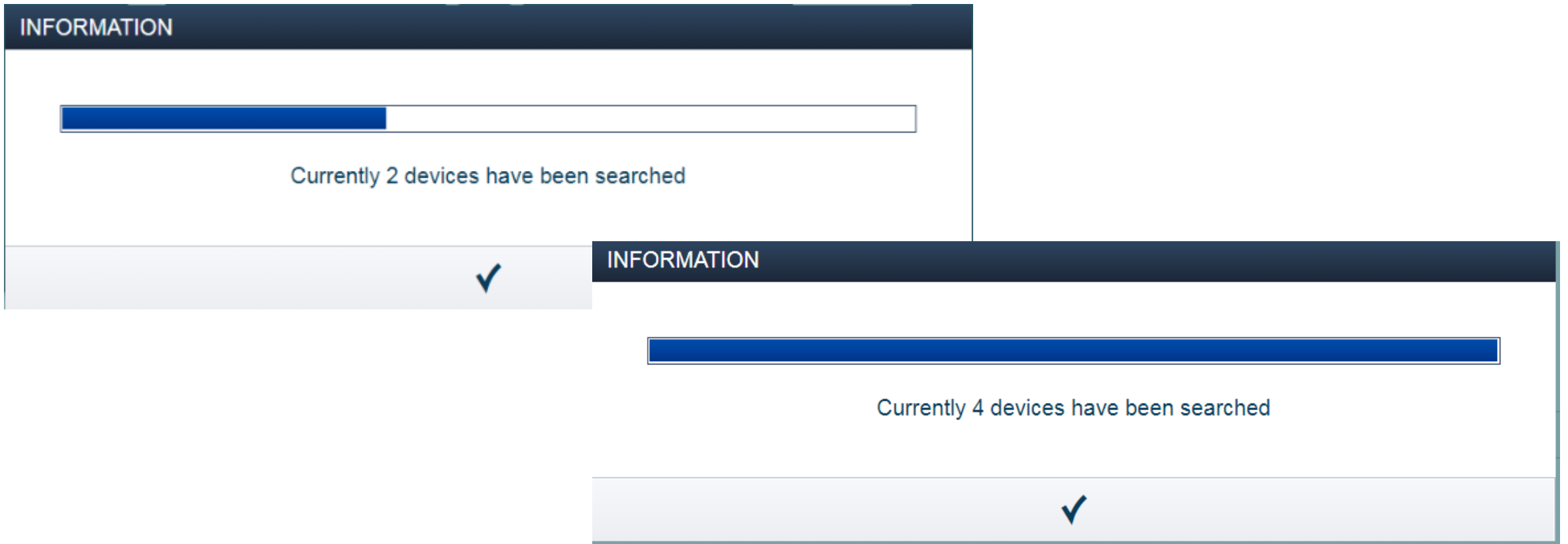
Typical Example No.1

Device Management



Typical Example No.1

Device Management



Typical Example No.1

Device Management

HOME

0

SOS

< DEVICE MANAGEMENT >

OUTDOOR STATIONS

Add device

Outdoor Stations

Outdoor Station 001-01

Outdoor Station 001-02

Public Area

Outdoor Stations

Indoor Stations

IP Actuator

Guard Unit

Management Software

LIST VIEW

Outdoor Stations

Outdoor Station 001-01

Outdoor Station 001-02

Public Area

Typical example-1

Device Management

Click <add device> on the right top of the page

OUTDOOR STATIONS

Add device

Outdoor Stations

2nd-OS 066-0101-01

2nd-OS 066-0101-02

Public Area

Input the information of devices(Serial No can be found on the label of devices)

ADD DEVICE

Device type

Indoor Station

Device addr.

Block No.:

Floor No.:

Room No.:

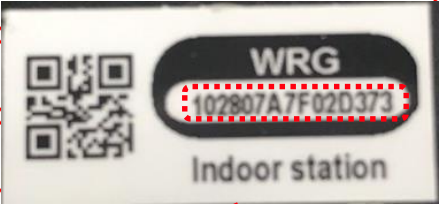
Device No.:

Serial No

Serial No.:

Cancel

save





Typical Example No.1

Indoor Station

Indoor Station 001-0105-01

No screensaver set for this indoor station yet

Settings

LIST VIEW

Physical addr.

Block No.:

1

Floor No.:

1

Room No.:

5

Device No.:

1

Logic addr.

Resident(s)/Tenant(s)

First name

Last name/Company name

Serial No.:

102807A7F02EAA6

Typical Example No.1

Indoor Station

| | | |
|------------------------|---|---|
| Additional settings | | |
| Physical addr. | 1 | > |
| Logic addr. | 2 | > |
| Duplicate settings | | > |
| Local firmware update | 3 | > |
| Online firmware update | | > |
| Resident(s)/Tenant(s) | 4 | > |
| Screensaver | | > |
| Floor plan | | > |
| Language | | > |

| LIST VIEW | |
|----------------|--------|
| Physical addr. | |
| Block No.: | 1 |
| Floor No.: | 1 |
| Room No.: | 5 |
| Device No.: | 1 |
| 1 | |
| ← | ✓ Save |

| LIST VIEW | |
|-------------|--------|
| Logic addr. | |
| B105 | |
| 2 | |
| ← | ✓ Save |

| LIST VIEW | |
|-------------------------|--|
| Local firmware update | |
| Firmware update file | |
| Browser | |
| Firmware signature file | |
| Browser | |
| 3 | |

| LIST VIEW | |
|------------------------|---|
| Resident(s)/Tenant(s) | |
| First name | 4 |
| Martin | |
| Last name/Company name | |
| Wichary | |

Typical Example No.1

Outdoor Station

HOME

0

SOS

< DEVICE MANAGEMENT >

Outdoor Station 001-01



Settings

LIST VIEW

Device type

Outdoor Station

Physical addr.

Block No.: 1

Device No.: 1

Serial No.:

101807A7F02EAAA

Version

HGO05_Digital_V1.07_20190311_PP_CX92755

Additional settings

Physical addr. >

Door lock setting >

Typical Example No.1

Outdoor Station

| Additional settings | | |
|-------------------------|---|---|
| Physical addr. | 1 | > |
| Door lock setting | 2 | > |
| Time Synchronization | | > |
| Local firmware update | | > |
| Design label | 3 | > |
| Online firmware update | | > |
| List of trusted devices | | > |

| LIST VIEW | |
|------------------------|---|
| Device type | |
| Second-confirm Station | |
| Physical addr. | |
| Block No.: | 1 |
| Floor No.: | 1 |
| Room No.: | 1 |
| Device No.: | 1 |
| 1 | |
| Save | |

| LIST VIEW | |
|-----------------------------|--|
| Lock GND Open time:(1-10s) | |
| 5 | |
| NO-NC-COM Open time:(1-10s) | |
| 5 | |
| Default Lock | |
| Lock-GND | |
| Subsidiary Lock | |
| NO-NC-COM | |
| 2 | |
| Save | |

| LIST VIEW | |
|-------------------|--|
| Text | |
| 3 | |
| Symbol | |
| Browser | |
| Number of columns | |
| 1 column | |
| Font | |
| Arial Unicode MS | |
| Fontsize | |
| 10 | |
| Print | |

Typical Example No.1

Multi-Family House with X apartments

Additional settings

Physical addr. >

Door lock setting >

Time Synchronization >

Local firmware update >

Design label >

Online firmware update >

List of trusted devices 4 >

LIST VIEW

List of trusted devices

2nd-OS 001-0101-01
101807A7F02EAAA

Outdoor Station 001-05
101807A7F02966C

Indoor Station 001-0101-01
102807A7F02EAA4


4

Delete selected

Delete all

Add trusted devices

☐ Trust this management software

 Save

Add trusted devices

Please select device



☐ all

☐ building1

☐ Floor 1

☒ Indoor Station 001-0101-01

☐ 2nd-OS 001-0101-01

Typical Example No.1

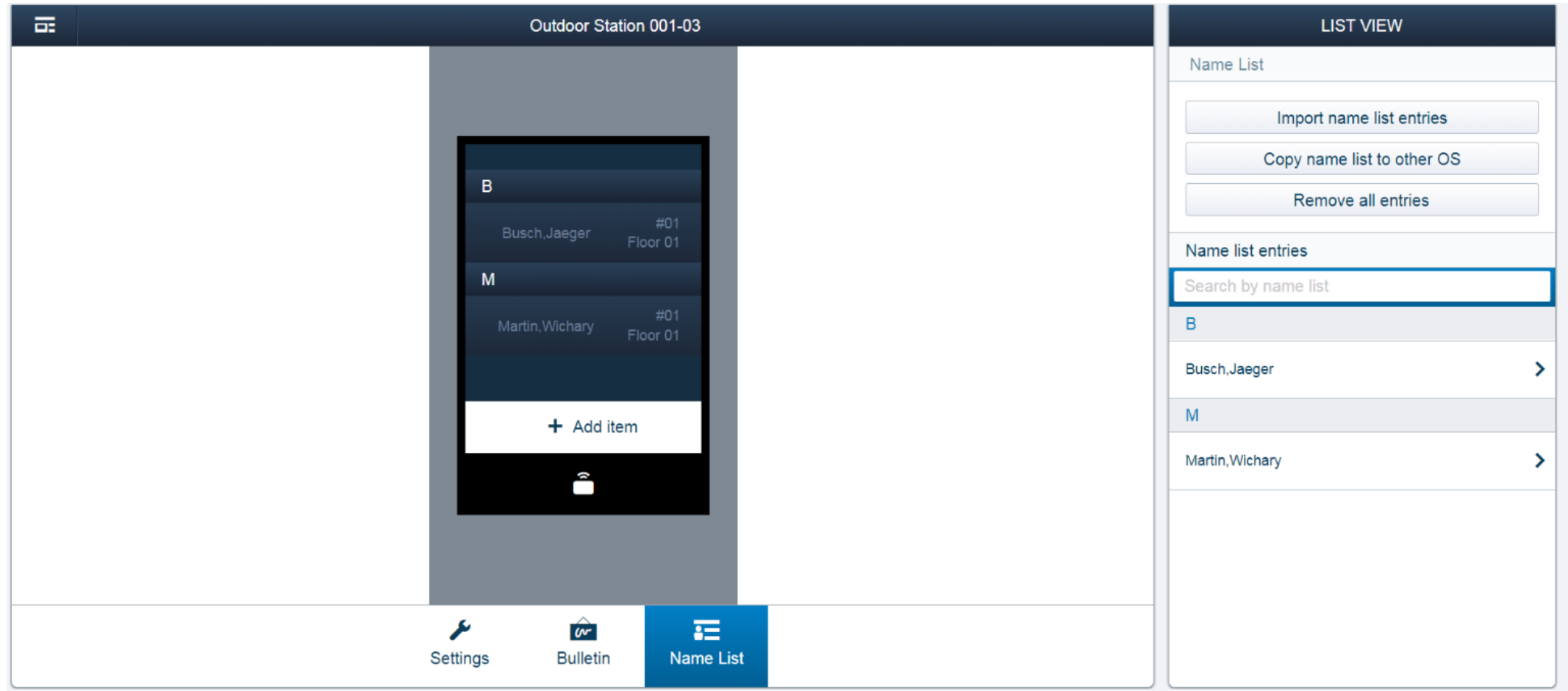
Settings for the 5" outdoor station

The screenshot displays the ABB Device Management web interface. At the top, a navigation bar includes 'HOME', a red circle with '0', an envelope icon, 'SOS', a circular arrow icon, and a battery icon. The main title bar shows '< DEVICE MANAGEMENT >'. Below this, a header for 'Outdoor Station 001-03' is visible. The central area features a large smartphone graphic with a 'Welcome' message and the text 'No welcome message.' at the bottom. A bottom navigation bar contains three icons: a wrench for 'Settings' (highlighted in blue), a megaphone for 'Bulletin', and a list icon for 'Name List'. On the right, a 'LIST VIEW' sidebar contains several input fields: 'Device type' (Outdoor Station), 'Physical addr.' (empty), 'Block No.:' (1), 'Device No.:' (3), 'Serial No.:' (101807A7F02966C), and 'Version' (HGO05_Digital_V1.07_20190311_PP_CX92755). Below these are 'Additional settings' with expandable sections for 'Physical addr.' and 'Calling type'.

| LIST VIEW | |
|---------------------|---|
| Device type | Outdoor Station |
| Physical addr. | |
| Block No.: | 1 |
| Device No.: | 3 |
| Serial No.: | 101807A7F02966C |
| Version | HGO05_Digital_V1.07_20190311_PP_CX92755 |
| Additional settings | |
| Physical addr. | > |
| Calling type | > |

Typical Example No.1

Settings for the 5" outdoor station

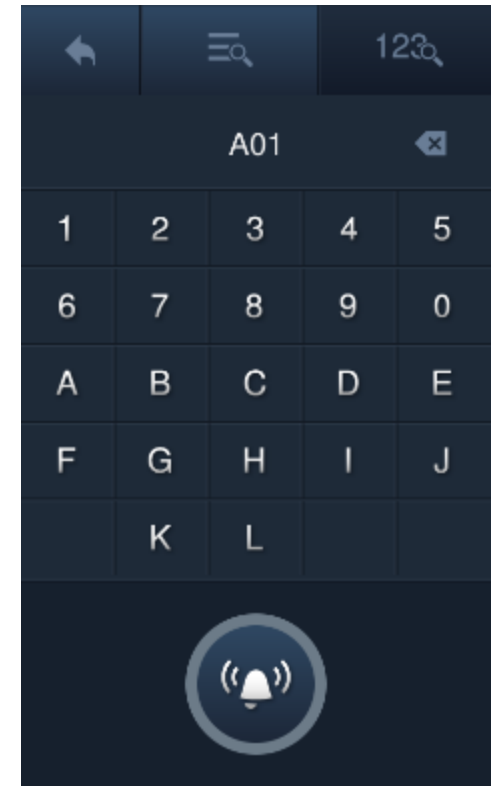
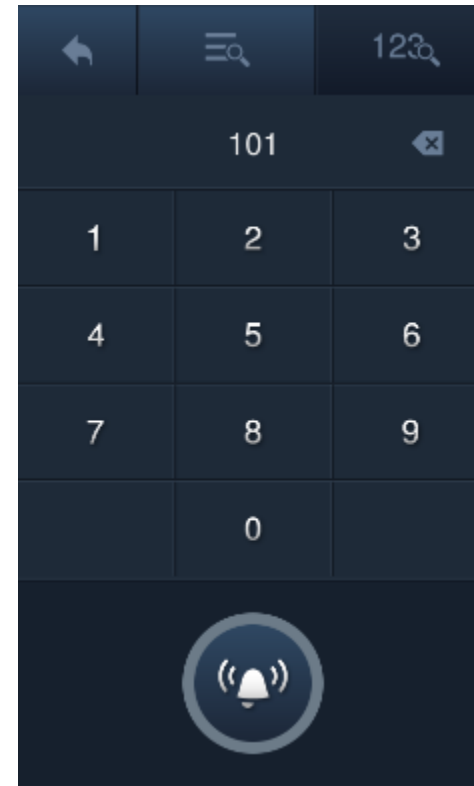
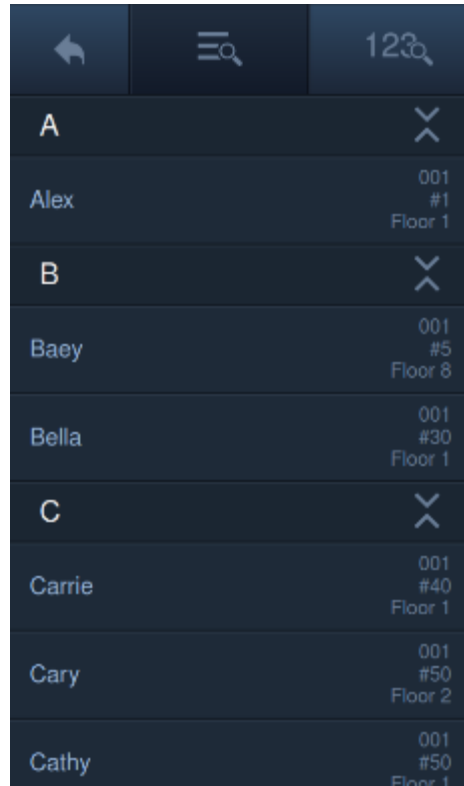


Typical Example No.1

Settings for the 5“ outdoor station

Multi-way calling options

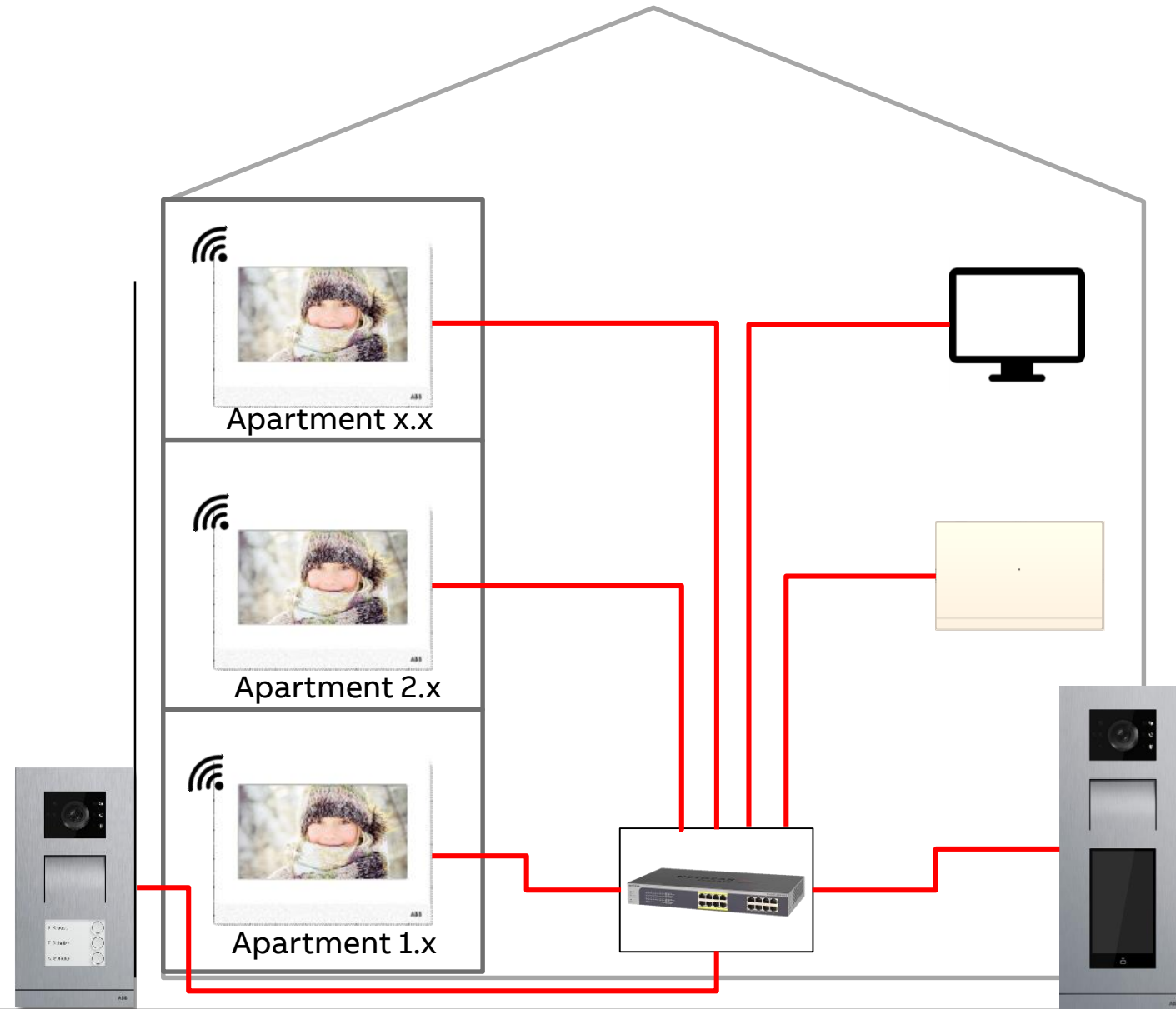
- Name list
- Physical address
- Logical address



Typical Example No.1

Multi-Family House with X apartments

1. Connecting all devices
2. Local settings on the device
3. Start Smart Access Point Lite
4. Create project
5. Add devices
6. Adjust settings of the panel
7. Adjust settings of the outdoor station
8. Add panels to trusted list

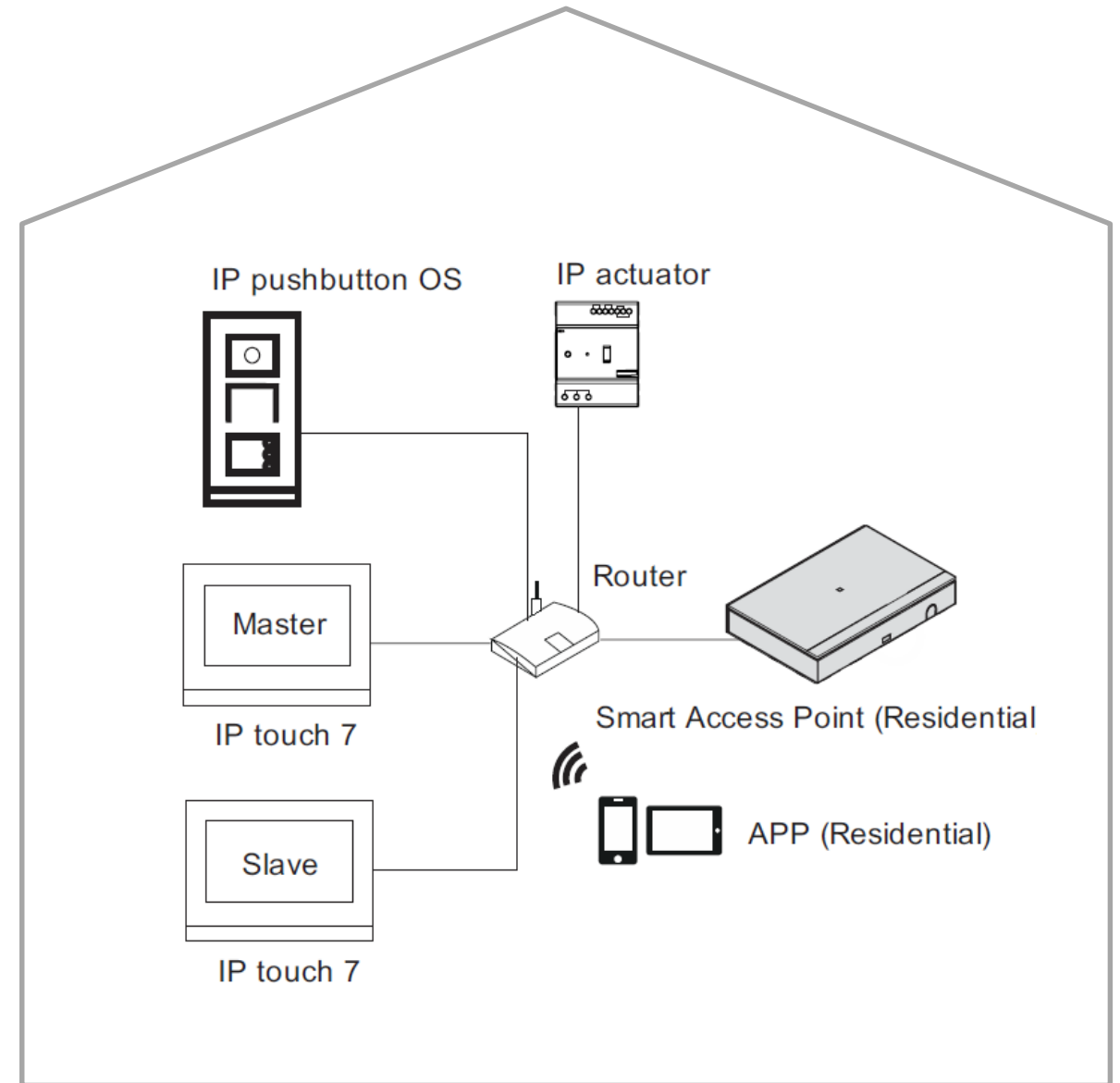


Typical Example No.2

Private house

Requirements:

- Smart Access Point Lite is set to residential mode
- Adding home devices to the home Smart Access Point Lite
- All the devices need to be set to the physical address locally before being added
- All the devices need to be powered on before being added
- Home Smart Access Point Lite can manage all home devices





Functions

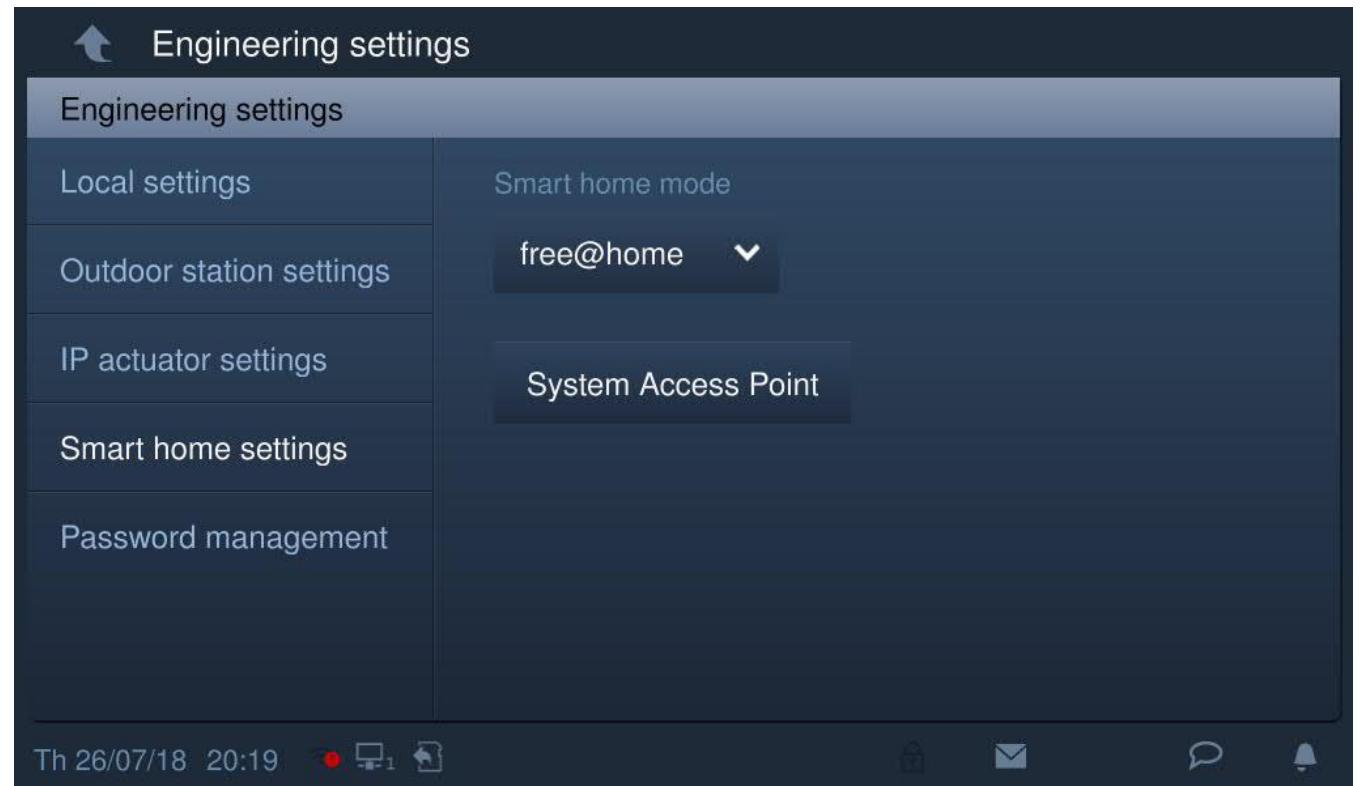
Door Communication

System Key features

Central panel for all

Central panel for DES, HA and others

- IP Touch 7 supports ABB-Welcome IP, ABB-AccessControl, ABB-VideoControl and ABB-free@home®
- Define the home page as you want

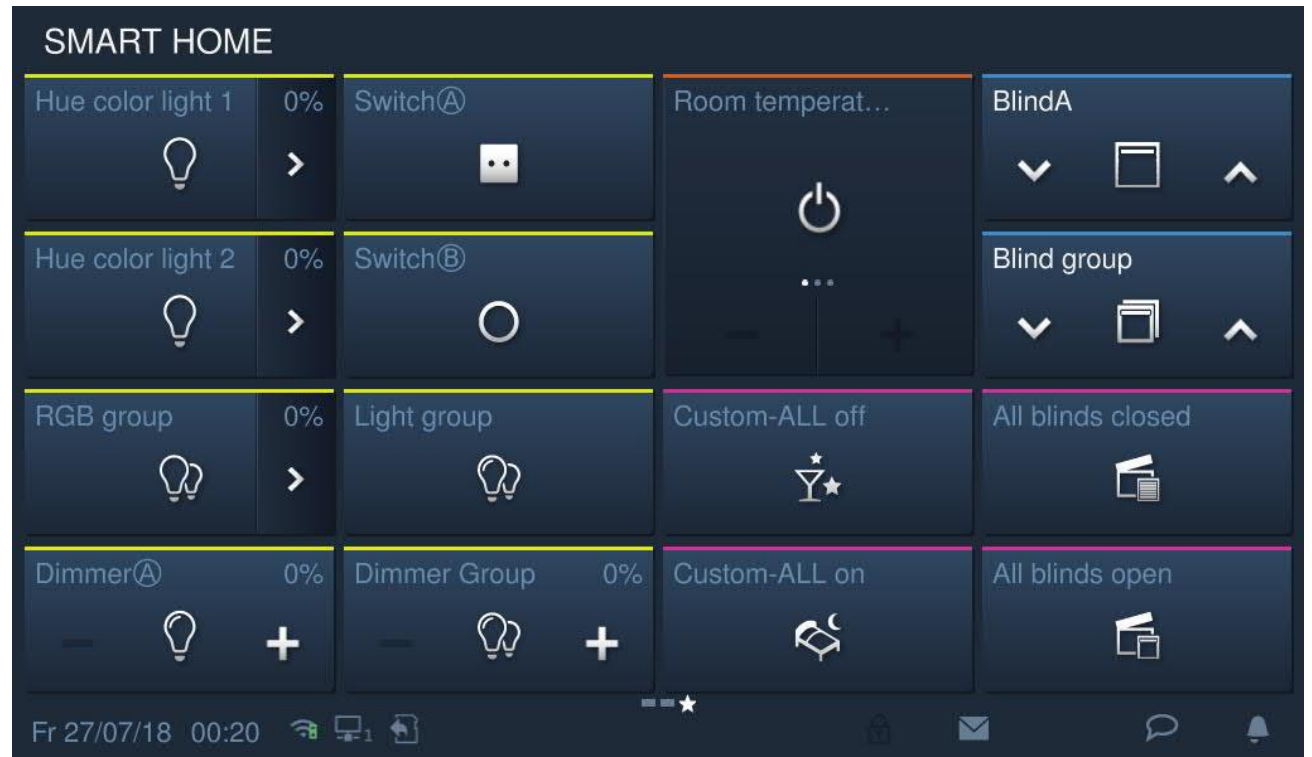


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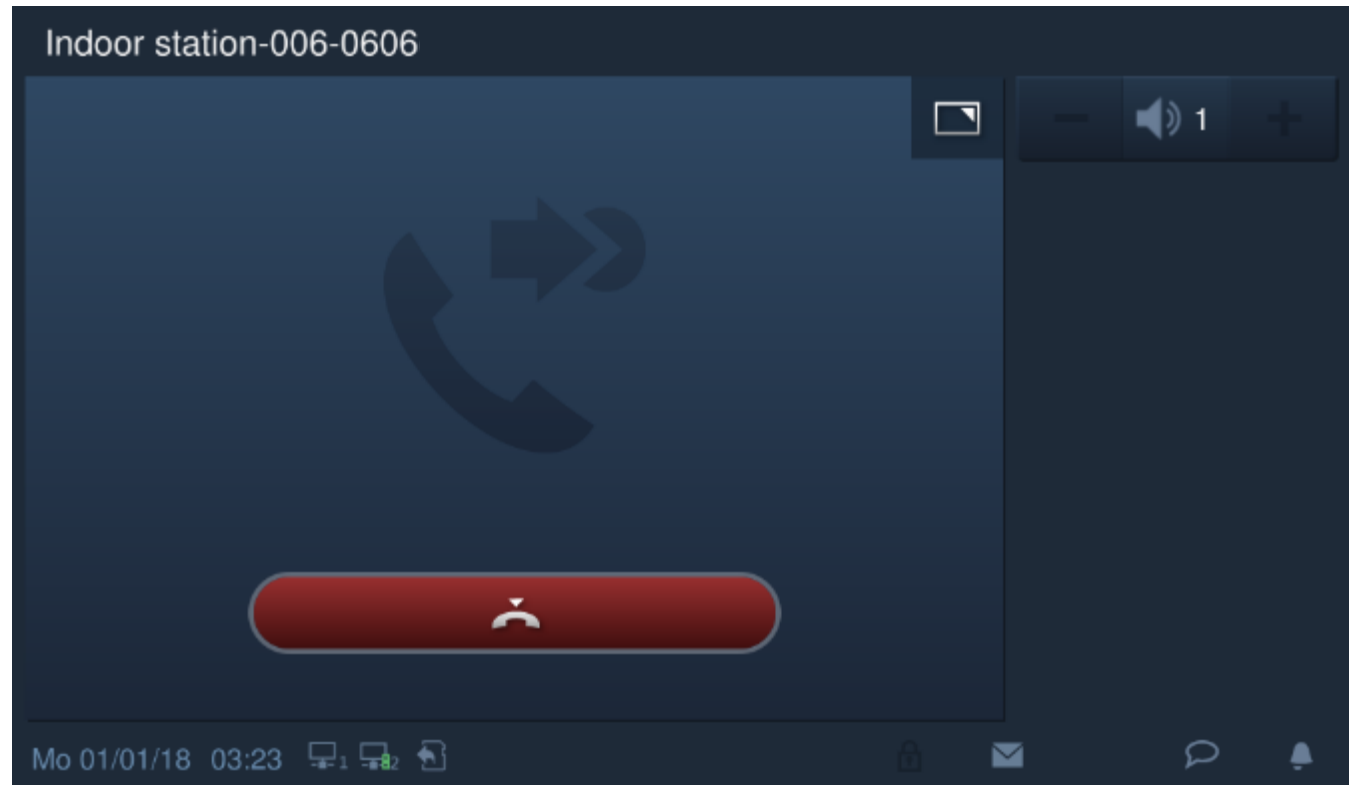


System Key features

Intercom

Apartment to Apartment intercom

- Call your friend who lives in same community by 7" IP touch panel with free of charge
- Create your contact list up to 32
- Create black list to avoid annoy from unfriendly person

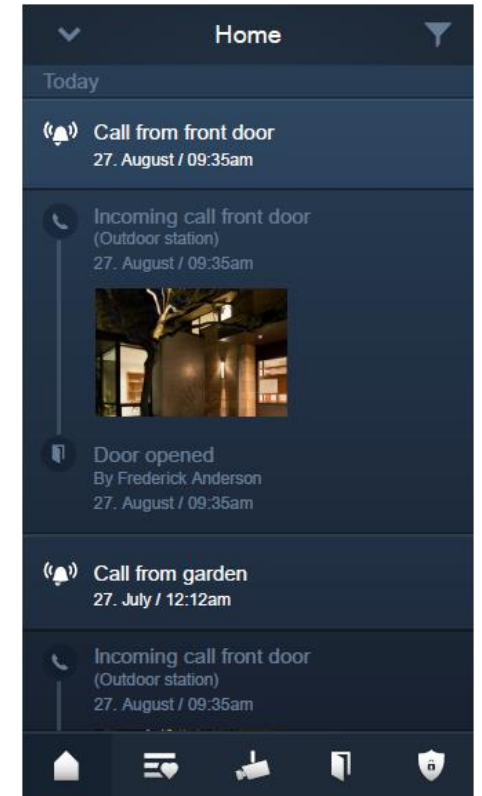
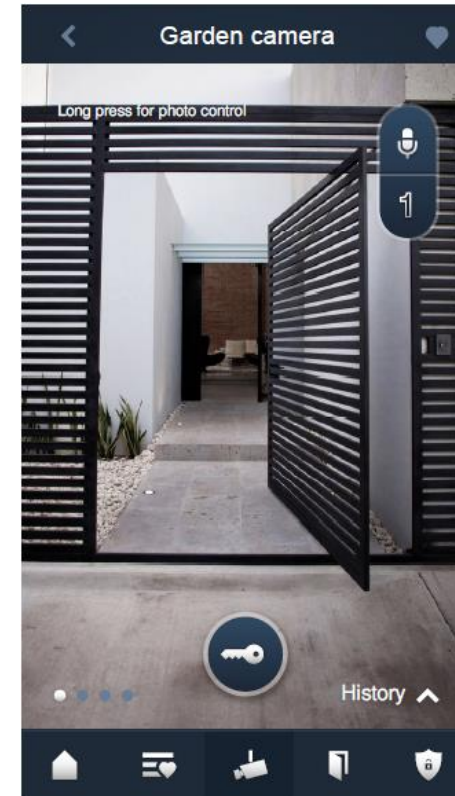
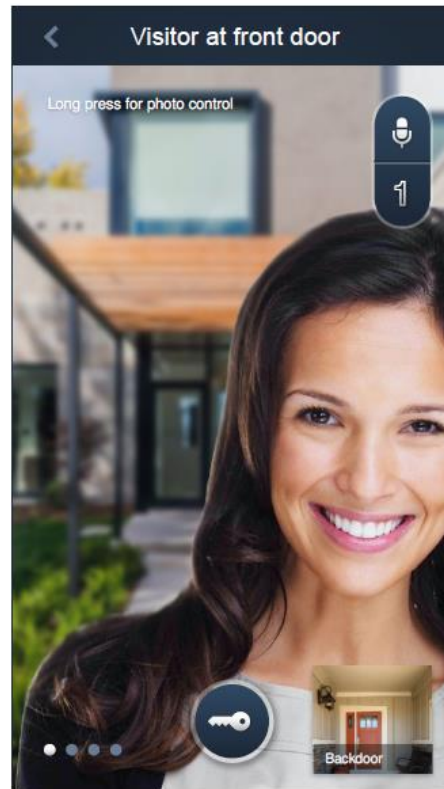


System Key features

Virtual Indoor station

Welcome app as virtual indoor station

- Answer the call from outdoor station at anywhere(Local and remote)
- Unlocking for your visitors at anywhere
- Surveillance and snapshot via APP
- History record
- Available for iOS and Android
- One APP for
 - ABB-Welcome IP
 - ABB-AccessControl
 - ABB-VideoControl

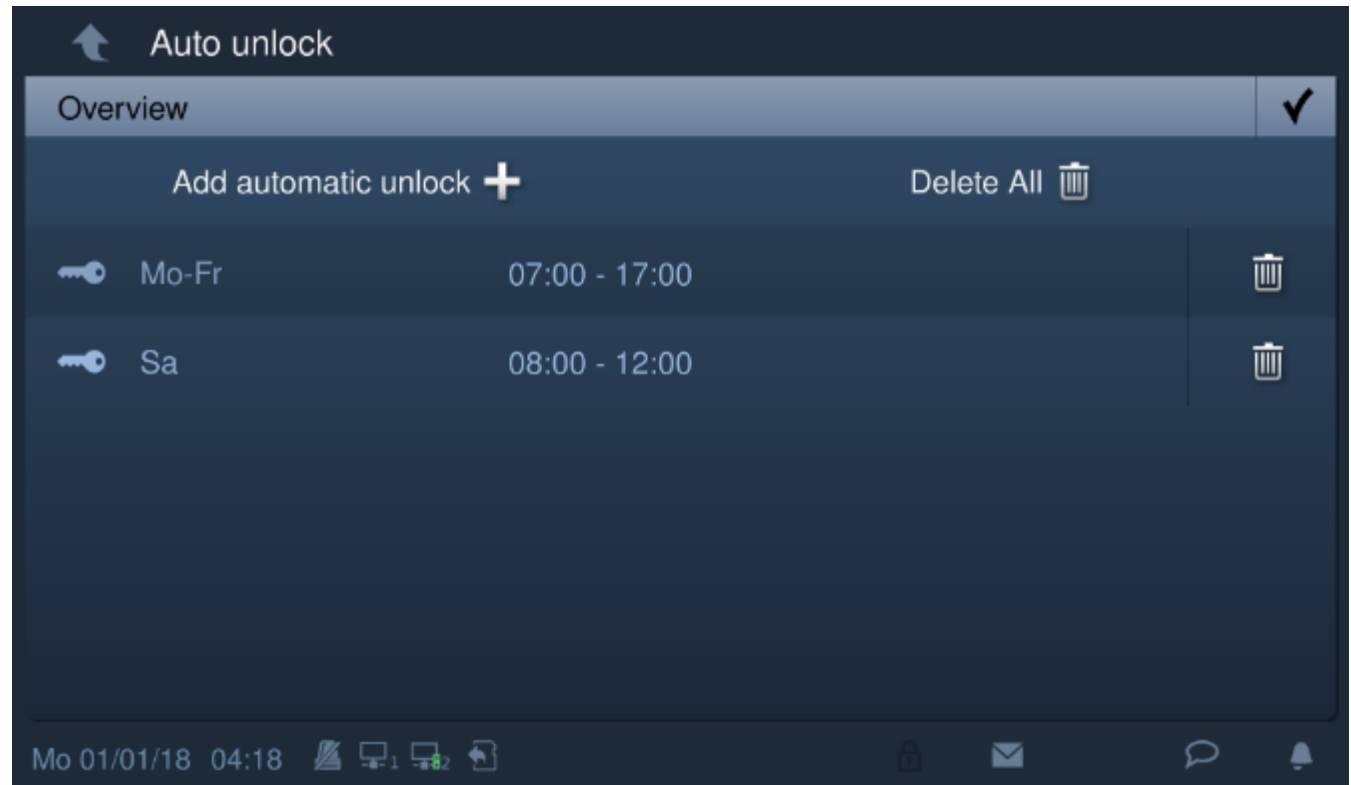


System Key features

Auto Unlock

Auto unlock with time profile

- Create auto unlock item or group with time profile
- Suitable for commercial applications

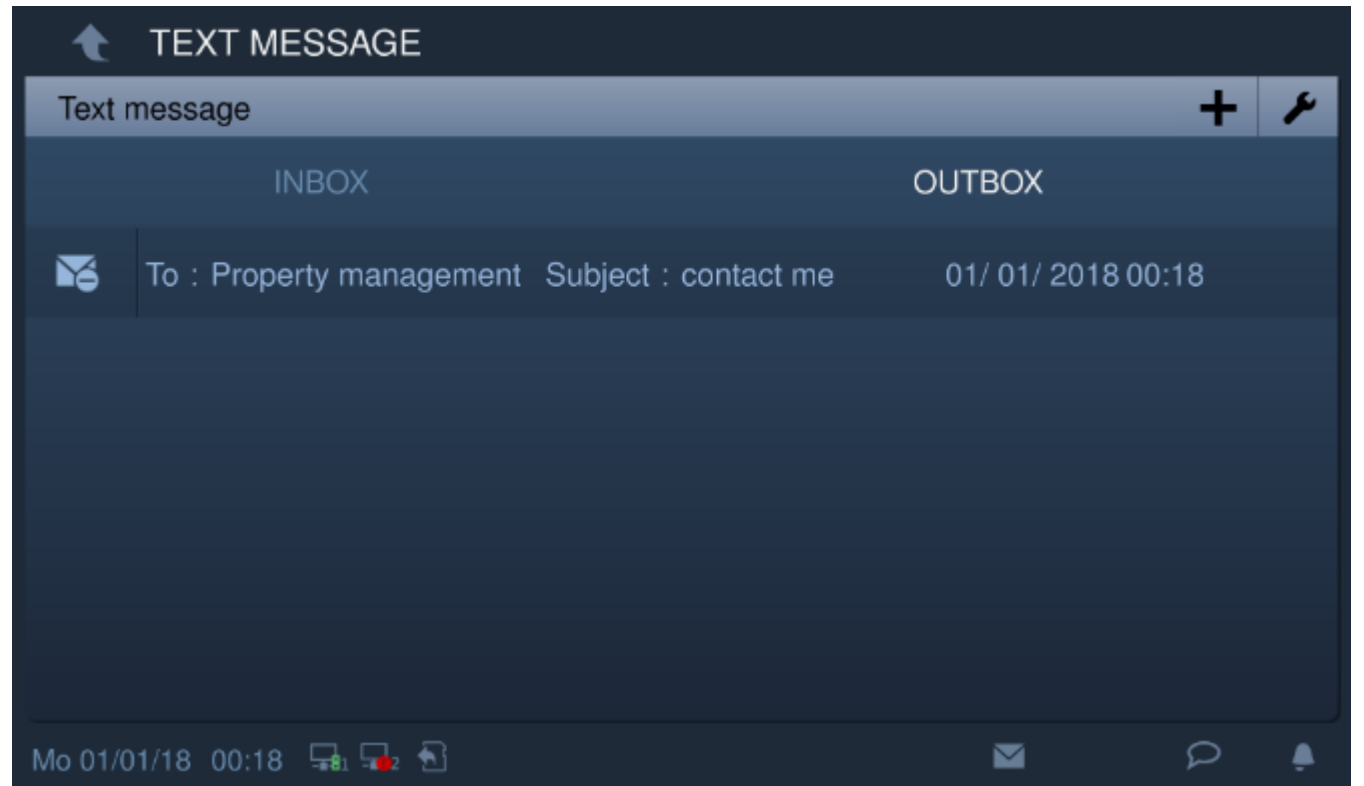


System Key features

Text message

Text communication

- Send text message to property manager for asking help (management software)
- Receive text message from property manager for community announcement (management software)














System Key features

History record

History record

- Check the calling histories via IP touch 7” panel
- The histories can be export to SD card
- The histories can be store at ABB cloud

| DOOR ENTRY HISTORY | | | | |
|---|-------|-----------|--------------|---|
| All history records | | | |  |
|  | OS-01 | Unlock | 01/ 01/ 2018 | 02:14 |
|  | OS-01 | Unlock | 01/ 01/ 2018 | 02:14 |
|  | OS-01 | Unlock | 01/ 01/ 2018 | 02:14 |
|  | OS-01 | Missed | 01/ 01/ 2018 | 01:51 |
|  | OS-01 | Missed | 01/ 01/ 2018 | 01:50 |
|  | OS-01 | Take call | 01/ 01/ 2018 | 01:48 |

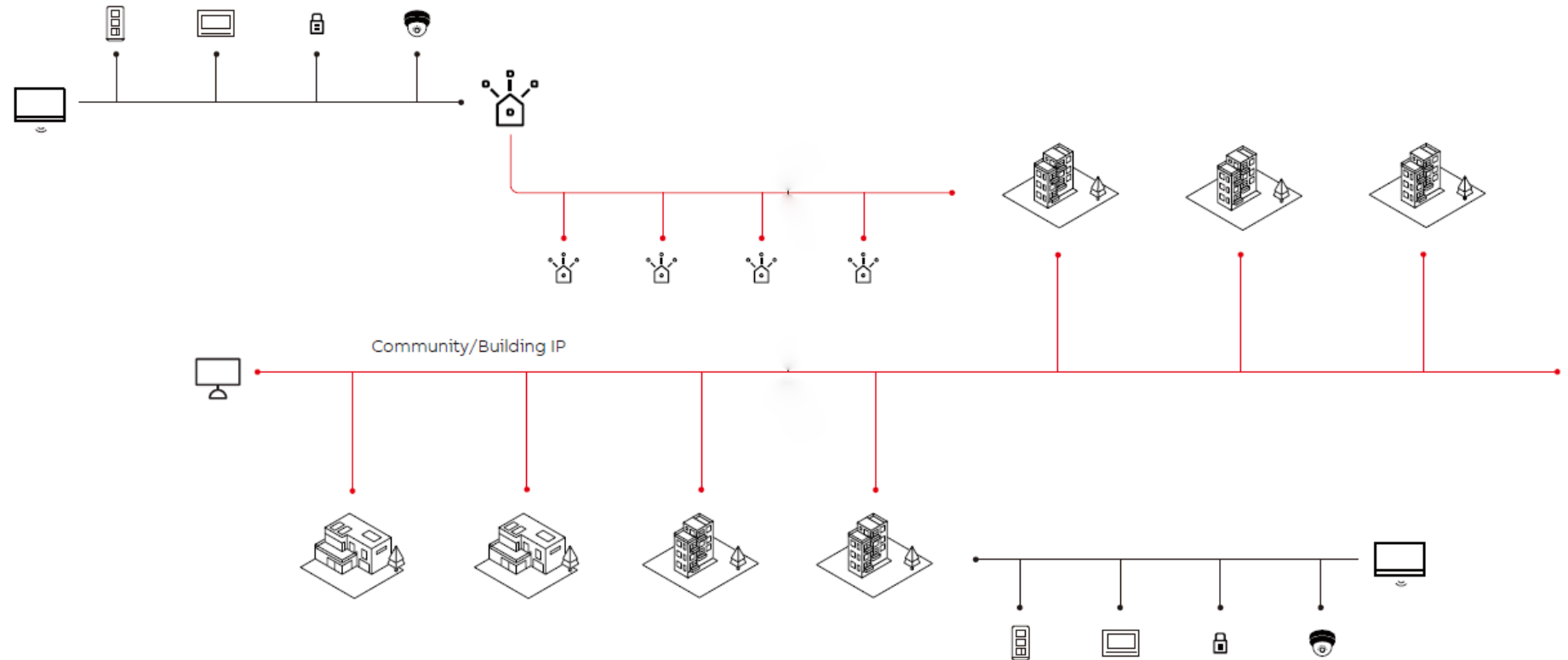
Mo 01/01/18 00:10    

Access all Possibilities

Summarize

Benefits

- Easy planning and commissioning by IP technology
- High scalability due to unlimited distances, users, solution and devices
- Provides maximum cyber security and data protection



Webinar “ABB-Welcome IP”

Training & Qualification – Database

In In this database you can find the complete online training portfolio for ABB Home and Building Automation

The database includes the following types of training content:

- Application Manuals
- E-Learnings
- Presentations
- Video tutorials
- Webinar slides and videos

www.abb.com/knx or <https://go.abb/ba-training>

→ Training and Qualification

→ Training Database

ABB HOME - OFFERINGS - LOW VOLTAGE PRODUCTS - HOME AND BUILDING AUTOMATION - TRAINING AND QUALIFICATION - TRAINING & QUALIFICATION DATABASE GLOBAL SITE

Training & Qualification Database

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The database includes the following types of training content:

- **Application Manuals:** Give a general description of the correct implementation of individual technical functions.
- **E-Learnings:** Learning modules to specific topics
- **Presentations:** Pdf files with learning content
- **Video tutorials:** Short instructional videos to specific topics
- **Webinar slides:** Slides of webinar sessions in pdf format
- **Webinar Videos:** Recording of webinar sessions

To search the database, select the required search criteria. To make multiple selections press [Ctrl].

| System | Application | Training Type | Language | Published |
|---|-------------|----------------|----------|------------|
| ABB-Free@home System Access Point 2.0 | Free@home | Webinar Slides | English | 2018-12-13 |
| ABB-Free@home System Access Point 2.0 | Free@home | Webinar Video | English | 2018-12-13 |
| KIUX LED Dimmer UQ/S | I-bus KIUX | Webinar Slides | English | 2018-12-07 |
| KIUX LED Dimmer UQ/S | I-bus KIUX | Webinar Video | English | 2018-12-07 |
| ClimaECO – Building Automation Controller BAC/S | I-bus KIUX | Webinar Slides | English | 2018-12-03 |
| ClimaECO – Building Automation Controller BAC/S | I-bus KIUX | Webinar Video | English | 2018-12-03 |

2018-11 Webinar about ABB Building Automation – ClimaECO – Building Automation Controller BAC/S

NOVEMBER 2018

ClimaECO – BA-Controller KNX BAC/S

Webinar – Competence Center Europe – Building Automation

Ilija Zivadinovic, Martin Wichary, Juergen Schilder, Thorsten Reibel, Stefan Grosse

Webinar “ABB-Welcome IP”

Training & Qualification – Calendar 2019

In addition to the online modules and the traditional training programs offered by your local ABB sales team, we offer a variety of on-site trainings conducted by our specialists at different ABB training facilities

In this Training & Qualification Calendar you can find the educational events that are taking place during 2019

If you are interested in a training please click the training und you will be forwarded to register in “ABB MyLearning”

www.abb.com/knx or <https://go.abb/ba-training>

→ Training and Qualification

→ Training Calendar



ABB HOME OFFERINGS LOW VOLTAGE PRODUCTS HOME AND BUILDING AUTOMATION TRAINING AND QUALIFICATION TRAINING & QUALIFICATION CALENDAR GLOBAL SITE

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To search the Calendar, select the required search criteria. To make multiple selections press [Ctrl].

| System | Date | Location | Language |
|-------------------------|---------------|----------------------|----------|
| all | all | all | |
| Door Entry Systems | January 2019 | Lüdenscheid, Germany | EN |
| KNX | February 2019 | Webinar | EN |
| Intrusion Alarm Systems | March 2019 | Heidelberg, Germany | EN |
| Fire Alarm Systems | April 2019 | Virtual Classroom | EN |

ABB MyLearning

HOME CATALOG PROFILE ADMINISTER REPORTS MY LEARNING

CERTIFIED KNX BASIC COURSE
Code : 9CSC007151-GLB-EN-20190218_22
Certified KNX Basic Course at ABB in Heidelberg, Germany, 5 days
★★★★★ | Share

| Content | Date | Location | Language |
|--|-------------------------|----------------------|----------|
| free@home - Solution for residential Buildings | 17.01.2019 - 18.01.2019 | Lüdenscheid, Germany | EN |
| Certified KNX Basic Course | 23.01.2019 - 25.01.2019 | Singapore | EN |
| secure@home - Planning and Commissioning | 23.01.2019 | Webinar | EN |
| Webinar (details coming soon) | 13.02.2019 | Webinar | EN |
| free@home - Solution for residential Buildings | 14.02.2019 - 15.02.2019 | Lüdenscheid, Germany | EN |
| Certified KNX Basic Course | 18.02.2019 - 22.02.2019 | Heidelberg, Germany | EN |
| Smarter Buildings, Better Experiences Workshop | 25.02.2019 - 26.02.2019 | Singapore | EN |

Webinar “ABB-Welcome IP”

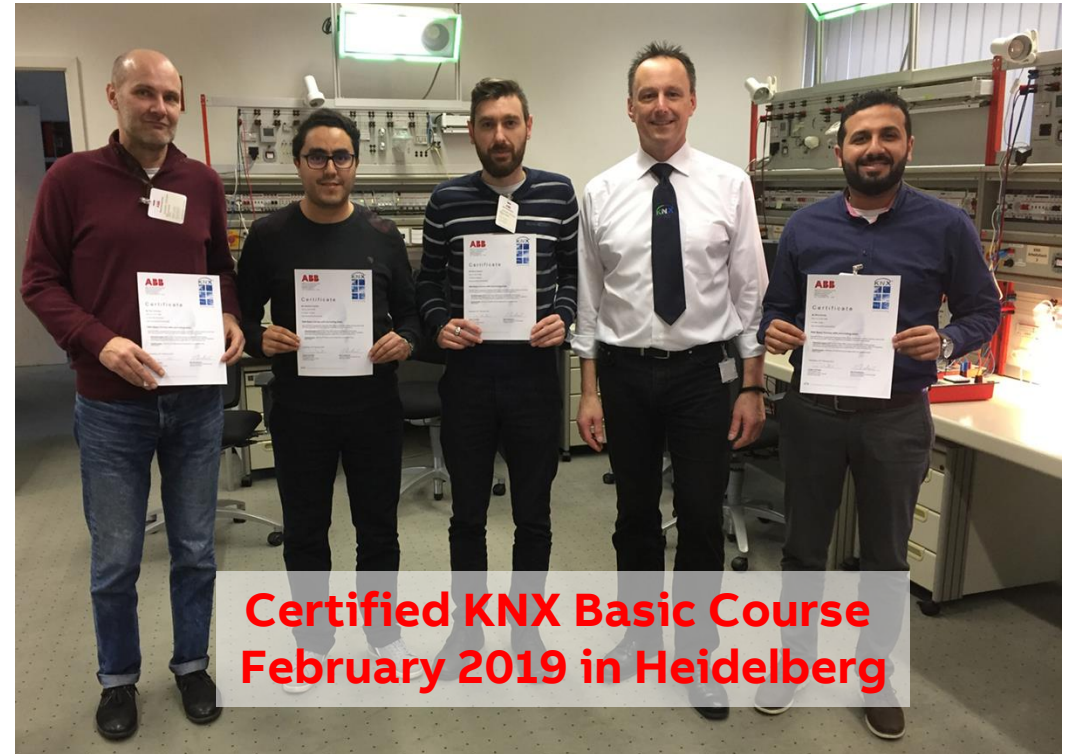
KNX Certified Training 2019

Certified KNX Courses in Heidelberg

- Advanced Course: 22nd to 26th July
- Tutor Course: 09th to 13th September
- Basic Course : 21st to 25th October
- Followed by two day application training

And many more training courses in the calendar
“International Training Dates 2019”

www.abb.com/knx or <https://go.abb/ba-training>



Webinar “ABB-Welcome IP”

Next Webinar

... the topic and date will be announced



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