MEET

by FERMAX

MEET SYSTEM V3.6 2024_01

Tender Specs to prepare a tender.

INDEX

GENERAL OVERVIEW

SYSTEM DESCRIPTION

The video intercom system shall:

a- Integrate visitor call units (VCU), user receiver units (URU) and security or administrator management units (SMU).

b- Be based on TCP/IP 10/100 BASE-T fast Ethernet network in accordance to international standards from IEEE 802.3.

c- Be integrated in GPON fiber optic networks.

d- Be full IP system, common Infrastructure and end devices shall be IP compatible avoiding use of gateways.

e- Adopt architecture based on VoIP standards.

f- Work on SIP Peer to Peer, not centralized architecture, without the need for a main server.

g- Work alternatively on SIP centralized architecture to facilitate integration.

h- Be capable of performing multiple and independent communication channels over the same network, one per house.

i- Be specifically conceived and designed for residential applications, differentiating the location of devices according to hierarchy of unit, building and condominium.

j- Provide additional features for access control, CCTV and lift control.

k- Be supplied by an experienced company in the field with long trajectory and well-known expertise.

l- Be capable to divert the calls to smartphones with Android/iOS OS and client SIP desktop apps.

m- Allow integration with other sub-systems like access control, IP CCTV cameras, lifts, alarms, Video Management Software and home automation systems.

n- Be certified compatible by VMS manufacturers.

o- Comply with the international specific standards for Door Entry Systems and Building Intercom Systems:

- IEC62820-1-1:2016 Building intercom systems. Part 1-1: System requirements – General.
- IEC62820-1-2:2017 Building intercom systems. Part 1-2: System requirements – IP building intercom systems.
- IEC 62820-3-1:2017 Building intercom systems. Part 3-1: Application guidelines – General.

p. Encrypt communications through SIP server using TLS protocol.

g. Provide a cloud SIP sever to support call divert.

SYSTEM FUNCTIONS

The video intercom system shall provide the following functions:

a. Call addressing with sound level adjustable between all the units (VCU, URU, SMU).

b. Identification of incoming call showing a customized tag for each device.

c. Both-ways audio communication with echo cancellation between URU, VCUs and SMU. Audio level adjustable individually in each unit.

d. One-way video communication between VCU and URU or SMU and between SMU and URU or other SMU.

e. Safe door lock activation from URU or SMU in conversation with VCU or IP CAM watch simply pressing a button. In option activate the lock from an indoor relay for higher safety.

f. Panic call from URU to SMU.

g. Call forwarding from VCU to SMU with different modes: always, if there is no answer from URU or never.

h. VCU call transfer from SMU to URU.

i. Call transfer of SMU received calls, in case of absence, to another SMU, smartphone or desktop SIP client.

j. Local or remote SMU location.

k. Call divert from VCU or SMU to one or several smartphones (iOS/Android) in parallel or sequential. Audio and video communication.

l. Tamper activation warning from URU and VCU to SMU.

m. Intercom between URU in different homes.

n. Intercom between URU in same home.

o. Door warning messages from VCU to SMU in case of door forced or door left open.

p. Audio and video messages recording in SMU when there are lost calls from VCU and audio messages recording on lost calls from URU.

q. Picture capture for calls received in URU and SMU. Extraction to SD card on SMU.

r. VCU and IP cameras watching from URU.

s. Management of several locks per VCU for associated doors from URU and SMU.

t. Watch alternative cameras associated to each VCU from URU and SMU.

u. Date and time update through NTP server.

v. Text messages from Management Software to URU.

w. Embedded RFID, face recognition. QR code and pin code access control in VCU.

x. RFID and QR code readers integration with third party door controllers.

y. Lift control from VCU, SMU and URU for visitors and residents.

z. Dated event log of the activity of the system: calls, door opening, alarms, invalid identification, with live report and history report generation on XLSX files.

aa. Third party integration through Apps installed on URU.

bb. Doorbell with CCTV on URU.

cc. Door unlock of all VCU by Fire Alarm signal.

dd. Individual relays activation (up to 8) per house from their URU for Home Automation tasks.

<In case of no SMU in the project, delete all sentences with SMU>

SYSTEM PERFORMANCE

The video intercom system shall:

a. Be configurable in logical entities according to a residential architecture with the following minimum elements:

  i. General entrances (VCU) to condominiums: 99.
  ii. Buildings/blocks: 999.
  iii. Entrances (VCU) to buildings/blocks: 99.
  iv. Houses per buildings/blocks: 9899.
  v. Private entrances (VCU) per house: 9.
  vi. Terminals (URU) per house: 10.
  vii. Security desk points (SMU) in each project: 98 masters and 8 slaves each, with selectable location on building or condominium.
  viii. Management Software per installation: 1.

b. Have URU, VCU and SMU powered indistinctly with 12Vdc power supply or PoE.
c. Have a video frame rate of at least, 25 fps.
d. Have an image resolution configurable at least between QVGA, VGA or HD to adapt to infrastructure devices (switches) and data traffic.
e. Have a video compression based on H264 standard ISO/CEI14496-10 or better with variable bit rate to reduce the required bandwidth.
f. Have an audio based on codec G.711.

SYSTEM SETUP

The video intercom system shall:

a- Configure its IP addresses freely in any sub-net.
b- Include a secure and protection way to avoid assign repeated IP addresses to different units.
c- Allow configure the devices via a built-in web server on each device protected by a customizable identifier and password. Such feature allows configure multiple VCU, SMU and URU stations extending their common parameters.
d- Allow configure lift control from a local PC using a dedicated Software tool.
e- Be firmware upgradable and down gradable individually from any point of the installation using a PC.
f- Provide a mechanism to subscribe smartphones to the URU so they can receive calls diverted from their house.

SYSTEM INTEGRATION

The video intercom system shall be compatible and connectable with:

Access control readers

a- VCU shall seamlessly integrate RFID card reader as a built-in unit within the same aesthetic in one single panel.
b- VCU shall be standalone to grant permission to users without the need of a centralized server.
c- VCU shall be able to accept Wiegand external access control readers.
d- VCU shall accept RFID readers from other brands.
e- VCU embedded RFID reader shall be connectable to third party door controllers.

IP based CCTV cameras

 a- System shall interface with multi brand IP based CCTV cameras through RTSP protocol allowing monitoring from URUs in a selective way (home, building, general entrance) and optionally activating one relay for lock activation or alternative function.

 b- SMU shall select an IP camera to be used as video source when calling to any URU or SMU.

 c- URU shall receive private doorbell call with video from IP camera.

 d- VCU shall provide a different scene view angle provided by additional IP cameras with RTSP protocol.

Lift Control

System shall interface with multi brand Lifts based on low level relay interface. Lift should interface with VCU (visitors and residents) and URU or APP (residents).

System shall interface with other lift control gateways by means of high level protocol.

Alarm System

Every URU shall manage a local alarm system that must transmit all alarm triggers to the management Software and SMU. Alarm system shall be deactivated using RFID card on VCU when user arrives home.

Smartphones

System shall be able to divert incoming calls to houses from VCUs and SMUs to Smartphones via an App, available in both Android and iOS markets. The smartphone shall have both-ways audio & video from these units and have the possibility of door opening. It shall be possible to call to VCU from the smartphone.

Fiber Optic infrastructures

The devices shall work through fiber optics elements like extenders, GPON and EPON (ONT, OLT, ONU) elements.

Video Management Systems

The VCU shall be integrable with third party Video Management Systems to provide additional features such us Face Recognition, Call Reception, Audio & Video intercom, Door unlock, Video Recording, and other video analysis functions.

Apps on VCU

VCU shall allow installation of compatible third party apps in order to manage other systems (home automation, security, comfort,…) from URU screen.

COMPONENTS

<u>VISITOR CALL UNITS (VCU)</u>

CAPACITIVE DIGITAL VIDEO VISITOR CALL UNIT

Description

The VCU shall be of compact structure and include the following elements: audio amplifier, video color camera with white led scene illumination, informative display, capacitive keypad and RFID proximity card reader.

Configuration

- VCU shall be configured through an embedded web server.
- VCU shall be configurable to work as a General Entrance panel or Block panel.
- VCU shall have audio level adjustable for speech messages.
- VCU shall have at least 11 text & speech configurable languages.
- VCU shall provide a simple way to show the current network configuration.
- Date and time shall be updated by an NTP server, Management Software or SMU.
- VCU shall be reset to factory settings when needed.
- VCU would be registered in a SIP server to extend the scope of action outside the local network. Server registration shall be visually confirmed.
- VCU shall be firmware upgradeable.

Functions

VCU shall provide the following functions:

<u>Information</u>

- In standby the VCU shall show information in local language regarding the use for the visitor together the date and time.
- Feedback of every call stage by means of graphical and text information: call, conversation, door unlock, end of conversation.
- VCU shall speech door unlocking status in local language as an aid to visitor or owner.

<u>Call</u>

- Direct call to URU. Key in a digital code of 1 to 4 digits for block entrance and 5 to 7 digits for general entrance.
- Call to URU shall be optionally diverted to smartphones without additional infrastructure just through a connection to internet.
- Call to SMU. Dialing a unique code.

Auto-on

- Accept call from URU, APP or SMU, showing video. In this case, the VCU shall generate no sound. User shall be able to open audio communication at his will.

Conversation

- A timed bidirectional audio and one way video communication with URU, with timing information on the display.
- Alternate IP cameras shall be associated to the VCU to have selectable different points of view from URU.

Access Control

- Activate the electric lock in different ways:
    o Command from a resident unit, smartphone or SMU in communication.
    o Validation of a resident Mifare proximity card. Each resident shall have at least one individual card that will activate the electric lock. The cards shall be alternatively defined with an expiry date. Minimum capacity shall be 100.000 users.
    o Validation of a resident face by an embedded Face Recognition engine using the camera of the VCU. Minimum capacity shall be 6.000 users.
    o Pin code introduced through the VCU keypad.
    o Egress button activation.
    o Unlock in case of Fire Alarm situation.
    o External access control system.
- The electric lock relay shall have a timing activation and a delay time activation.
- Speech message shall be played in local language to give feedback for door lock activation.
- Alternative lock activation from indoor relay shall be provided for safety.
- Disable private house alarm system for each user through their RFID card.

Lift Control

- VCU shall communicate the lift control system the allowed floors for each visitor and resident.
- Lift control activation for residents shall be compatible with RFID, Face Recognition and App.

Events

- Generate an immediate event information for each activity to the Software Manager with date, time, picture and VCU information for security record.
- Generate alarms activity (tamper, door left open, door forced) to the SMU and SM.

Integration

- VCU shall generate a RTSP video stream for integration with third party DVR or VMS.
- VCU shall integrate with 3rd party door controllers through two ways Wiegand interface.
- VCU shall connect with an external RFID reader to allow access.

Characteristics

Audio

- Both-ways audio with automatic echo and noise cancelling.
- 1W Loudspeaker.
- Overall Loudness Rating (OLR)> 15dB.
- Acoustic distortion <1%
- Channel S/N ratio >40dB
- Idle channel noise < 32dB (A)
- Electret microphone.

Video

- Sensor: 1/3" color CMOS.
- Effective pixels 1,3 Mpixel.
- Minimum external illumination: 0 lux.
- S/N >45dB.
- Frame rate 25 fps.
- Resolution selectable (QVGA, VGA, HD).
- Auto iris.
- Auto BLC.
- View angle 90º diagonal.
- Color night vision through white led with automatic light detection.
- Mechanical Pan & Tilt.

TFT

- Size: 4,3".
- Format 16:9.
- Resolution: 480x272 pixel.
- Colors: 16.7M.
- Contrast ratio: 400/1.
- Brightness: 200 cd/m2.
- Viewing angle: 100H/90V.
- Backlight: 6 leds.
- Presence detection at 0,5m to switch on the TFT and preserve its range live.

Mechanical

The VCU shall:

- Be mounted on its own purpose-designed metallic flush or surface mounting box.
- Have a slim aesthetic appearance, available in crystal and aluminum design with no visible screws.
- Include a 4 x 3 matrix capacitive touch keypad.

- Have all touch buttons with a backlight led.

Electrical

Power supply shall be provided by external source with 12VDC.

Environmental

VCU shall comply with at least:

- IP 54.
- Temperature range: -20 .. +60 ºC.
- Humidity range: 5-90% (non-condensing).

Physical Security

- VCU shall have no visible screws to avoid unauthorized access.
- In case the VCU is disassembled from its mounting box a warning alarm message must be sent to the SMU.
- In case the door controlled by the VCU is left open or forced it shall send a warning alarm to the SMU and SM.

Interfaces

VCU shall:

- Be connected to local network by standard RJ-45 connector.
- Accept integration of any commercial proximity reader through Wiegand 26 bits interface.
- Operate one electric lock or gate through one relay with NO and NC 10A/ 24Vdc contacts.
- Monitor a door sensor to know the status of the controlled door.
- Communicate with lift control devices to allow lift access to enabled floors to visitors or residents.
- Be connected to an egress button normally open.
- Be connected to a Fire Alarm system to unlock the door.
- Communicate with external relays for safe indoor lock activation and additional associated doors unlocking.
- Be connected to a third-party access controller through Wiegand-26 bit interface for embedded RFID reader external validation.
  [THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFRERENCE	DESIGNATION
9532	MEET DIGITAL VIDEO TOUCH PANEL
9542	MILO DIGITAL PANEL FLUSH BOX MEET
95171	MILO DIGITAL PANEL SURFACE BOX MEET ALU
9512	STEEL MILO DIGITAL PANEL HOOD
9536	MILO DIRECTORY PANEL MEET
14591	MEET FLUSH BOX JOINING BOLTS SET

DIGITAL VIDEO VISITOR CALL UNIT

Description

The VCU shall be of compact structure and include the following elements: audio amplifier, video color camera with white led scene illumination, informative display, mechanical keypad and RFID proximity card reader.

Configuration

- VCU shall be configured through an embedded web server.
- VCU shall be configurable to work as a General Entrance panel or Block panel.
- VCU shall have audio level adjustable for audio speech messages.
- VCU shall have at least 11 text & speech configurable languages.
- VCU shall provide a simple way to show the current network configuration.
- Date and time shall be updated by an NTP server, Management Software or SMU.
- VCU shall be reset to factory settings when needed.
- VCU would be registered in a SIP server to extend the scope of action outside the local network. Server registration shall be visually confirmed.
- VCU shall be firmware upgradeable.

Functions

VCU shall provide the following functions:

Information

- In standby the VCU shall show information in local language regarding the use for the visitor together the date and time.
- Feedback of every call stage by means of graphical and text information: call, conversation, door unlock, end of conversation.
- VCU shall speech door unlocking status in local language as an aid to visitor or owner.

Call

- Direct call to URU. Key in a digital code of 1 to 4 digits for block entrance and 5 to 7 digits for general entrance.
- Call to URU shall be optionally diverted to smartphones without additional infrastructure just through a connection to internet.
- Call to SMU. Dialing a unique code.

Auto-on

- Accept call from URU or from SMU, showing video. In this case, the VCU shall generate no sound. User shall be able to open audio communication at his will.

Conversation

- A timed bidirectional audio and one way video communication with the URU, with timing information on the display.
- Alternate IP cameras shall be associated to the VCU to have different points of view from URU.

Access Control

- Activate the electric lock in different ways:
    o Command from a resident unit, smartphone or SMU in communication.
    o Validation of a resident Mifare proximity card. Each resident shall have at least one individual card that will activate the electric lock. The cards shall be alternatively defined with an expiry date. Minimum capacity shall be 100.000 users.
    o Validation of a resident face by an embedded Face Recognition engine using the camera of the VCU. Minimum capacity shall be 6.000 users.
    o Pin code introduced through the VCU keypad.
    o Egress button activation.
    o Unlock in case of Fire Alarm situation.
    o External access control system.
- The electric lock relay shall have a timing activation.
- Speech message shall be played in local language to give feedback for door lock activation.
- Alternative lock activation from indoor relay shall be provided for safety.
- Disable private house alarm system for each user through their RFID card.

Lift Control

- VCU shall communicate the lift control system the allowed floors for each visitor and resident.
- Lift control activation for residents shall be compatible with RFID, Face Recognition and App.

Events

- Generate an immediate event information for each activity to the Software Manager with date, time, picture and VCU information for security record.
- Generate alarms activity (tamper, door left open, door forced) to the SMU and SM.

Integration

- VCU shall generate a RTSP video stream for integration with third party DVR or VMS.
- VCU shall integrate with 3rd party door controllers through two ways Wiegand interface.
- VCU shall connect with an external RFID reader to allow access.

Characteristics

Audio

- Both-ways audio with automatic echo and noise cancelling.
- 1W Loudspeaker.
- Overall Loudness Rating (OLR)> 15dB.

- Acoustic distortion <1%
- Channel S/N ratio >40dB
- Idle channel noise < 32dB (A)
- Electret microphone.

Video

- Sensor: 1/3" color CMOS.
- Effective pixels 1,3 Mpixel.
- Minimum external illumination: 0 lux.
- S/N >45dB.
- Frame rate 25 fps.
- Resolution selectable (QVGA, VGA, HD).
- Auto iris.
- Auto BLC.
- View angle 90º diagonal.
- Color night vision through white led with automatic light detection.
- Mechanical Pan & Tilt.

TFT

- Size: 4,3".
- Format 16:9.
- Resolution: 480x272 pixel.
- Colors: 16.7M.
- Contrast ratio: 400/1.
- Brightness: 200 cd/m2.
- Viewing angle: 100H/90V.
- Backlight: 6 leds.
- Presence detection at 0,5m to switch on the TFT and preserve its range live.

Mechanical

The VCU shall:

- Be mounted on its own purpose-designed metallic flush or surface mounting box.
- Have a slim aesthetic appearance, available in high resistance PMMA and aluminum design with no visible screws.
- Include a 4 x 3 matrix pushbuttons keypad.
- Have all pushbuttons with a backlight led.

Electrical

Power supply shall be provided by external source with 12VDC.

Environmental

VCU shall comply with at least:
- IP 54.
- Temperature range: -20 .. +60 ºC.
- Humidity range: 5-90% (non-condensing).

Physical Security

- VCU shall have no visible screws to avoid unauthorized access.
- In case the VCU is disassembled from its mounting box a warning alarm message must be sent to the SMU.
- All pushbuttons shall be firmly attached and prevent extraction with external tool and avoid seize up.
- In case the door controlled by the VCU is left open or forced it shall send a warning alarm to the SMU and SM.

Interfaces

VCU shall:

- Be connected to local network by standard RJ-45 connector.
- Accept integration of any commercial proximity reader through a Wiegand 26 bits interface.
- Operate one electric lock or gate through one relay with NO and NC 10A/ 24Vdc contacts.
- Monitor a door sensor to know the status of the controlled door.
- Communicate with lift control devices to allow lift access to enabled floors to visitors or residents.
- Be connected to an egress button normally open.
- Be connected to a Fire Alarm system to unblock the door.
- Communicate with external relays for safe indoor lock activation and additional associated doors unlocking.
- Be connected to a third-party access controller through Wiegand-26 bit interface for embedded RFID reader external validation.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFRERENCE	DESIGNATION
9531	MEET DIGITAL VIDEO PANEL
9542	MILO DIGITAL PANEL FLUSH BOX MEET
95171	MILO DIGITAL PANEL SURFACE BOX MEET ALU
9512	STEEL MILO DIGITAL PANEL HOOD
9536	MILO DIRECTORY PANEL MEET
14591	MEET FLUSH BOX JOINING BOLTS SET

ONE WAY VIDEO VISITOR CALL UNIT

Description

The VCU shall be of compact structure and include the following elements: audio amplifier, video color camera with white led scene illumination and one call pushbutton.

Configuration

- VCU shall be configured remotely through an embedded web server.
- VCU shall have audio level adjustable for audio speech messages.
- Date and time shall be updated by an NTP server, Management Software or SMU.
- VCU shall be reset to factory settings when needed.
- VCU would be registered in a SIP server to extend the scope of action outside the local network. Server registration shall be visually confirmed.
- VCU shall be firmware upgradeable.

Functions

VCU shall provide the following functions:

Call

- Direct call to one URU pressing the pushbutton.
- Call to URU shall be optionally diverted to smartphones without additional infrastructure just through a connection to internet.
- Call to SMU if the pushbutton is configured accordingly.

Auto-on

- Accept call from resident unit, showing video. In this case, the VCU shall generate no sound. User shall be able to open audio communication.

Conversation

- A timed bidirectional audio and one way video communication with the resident's terminals.
- Audible information of the status of the communication with speech synthesis.

Access Control

- Activate the electric lock in different ways:
    o Command from a resident unit, smartphone or SMU in communication.
    o Egress button activation.
    o External access control system.
- The electric lock relay shall have a timing activation and a delay time activation.
- Speech message shall be played in local language to give feedback for door lock activation.
- Disable private house alarm system for each user through their RFID card.

Events

- Generate an immediate event information for each activity to the Software Manager with date, time. picture and VCU information for security record.
- Generate alarms activity (tamper, door open, door forced) to the SMU and SM.

Characteristics

Audio

- Both-ways audio with automatic echo and noise cancelling.
- 1W Loudspeaker.
- Overall Loudness Rating (OLR)> 15dB.
- Acoustic distortion <1%
- Channel S/N ratio >40dB
- Idle channel noise < 32dB (A)
- Electret microphone.

Video

- Sensor: 1/3" color CMOS.
- Effective pixels 1,3 Mpixel.
- Minimum external illumination: 0 lux.
- S/N >45dB.
- Frame rate 25 fps.
- Resolution selectable (QVGA, VGA, HD).
- Auto iris.
- Auto BLC.
- View angle 90º diagonal.
- Color night vision through white led with automatic light detection.

Mechanical

The VCU shall:

- Be mounted on its own purpose-designed metallic flush or surface mounting box.
- Have a slim aesthetic appearance, available in high resistance PMMA and aluminum design with no visible screws.
- Include one pushbutton with a backlight led.

Electrical

Power supply shall be provided by external source with 12VDC or PoE.

Environmental

VCU shall comply with at least:

- IP 54.
- Temperature range: -20 .. +60 ºC.
- Humidity range: 5-90% (non-condensing).

Physical Security

- VCU shall have no visible screws to avoid unauthorized access.
- In case the VCU is disassembled from its mounting box a warning alarm message must be sent to the SMU.
- The pushbutton shall be firmly attached and prevent extraction with external tool and avoid seize up.
- In case the door controlled by the VCU is left open or forced it shall send a warning alarm to the SMU and SM.

Interfaces

VCU shall:

- Be connected to network by standard RJ-45 connector.
- Operate one electric lock or gate through one relay with NO and NC 10A/ 24Vdc contacts.
- Monitor a door sensor to know the status of the controlled door.
- Be connected to an egress button normally open.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERERENCE	DESIGNATION
9533	MEET 1W VIDEO PANEL
95331	MEET 1W VIDEO PANEL BLACK
9543	MILO 1W PANEL FLUSH BOX MEET
95181	ALLUMINIUM MILO 1W PANEL SURFACE BOX MEET

ONE WAY VIDEO VISITOR CALL UNIT WITH PROXIMITY READER

Description

The VCU shall be of compact structure and include the following elements: audio amplifier, video color camera with white led scene illumination, rfid proximity card reader and one call pushbutton.

Configuration

- VCU shall be configured remotely through an embedded web server.
- VCU shall have audio level adjustable for audio speech messages.
- Date and time shall be updated by an NTP server, Management Software or SMU.
- VCU shall be reset to factory settings when needed.
- VCU would be registered in a SIP server to extend the scope of action outside the local network. Server registration shall be visually confirmed.
- VCU shall be firmware upgradeable.

Functions

VCU shall provide the following functions:

Call

- Direct call to one URU pressing the pushbutton.
- Call to URU shall be optionally diverted to smartphones without additional infrastructure just through a connection to internet.
- Call to SMU if the pushbutton is configured accordingly.

Auto-on

- Accept call from resident unit, showing video. In this case, the VCU shall generate no sound. User shall be able to open audio communication.

Conversation

- A timed bidirectional audio and one way video communication with the resident's terminals.
- Audible information of the status of the communication with speech synthesis.

Access Control

- Activate the electric lock in different ways:
  - Command from a resident unit, smartphone or SMU in communication.
  - Validation of a resident Mifare proximity card. Each resident shall have at least one individual card that will activate the electric lock. The cards shall be alternatively defined with an expiry date. Minimum capacity shall be 100.000 users.
  - Egress button activation.
  - External access control system.
- The electric lock relay shall have a timing activation.
- Speech message shall be played in local language to give feedback for door lock activation.
- Disable private house alarm system for each user through their RFID card.

Events

- Generate an immediate event information for each activity to the Software Manager with date, time, ñicture and VCU information for security record.
- Generate alarms activity (tamper, door left open, door forced) to the SMU and SM.

Characteristics

Audio

- Both-ways audio with automatic echo and noise cancelling.
- 1W Loudspeaker.
- Overall Loudness Rating (OLR)> 15dB.
- Acoustic distortion <1%
- Channel S/N ratio >40dB
- Idle channel noise < 32dB (A)
- Electret microphone.

Video

- Sensor: 1/3" color CMOS.
- Effective pixels 1,3 Mpixel.
- Minimum external illumination: 0 lux.
- S/N >45dB.
- Frame rate 25 fps.
- Resolution selectable (QVGA, VGA, HD).
- Auto iris.
- Auto BLC.
- View angle 90º diagonal.
- Color night vision through white led with automatic light detection.
- Mechanical Pan & Tilt.

Mechanical

The VCU shall:

- Be mounted on its own purpose-designed metallic flush or surface mounting box.
- Have a slim aesthetic appearance, available in high resistance PMMA and aluminum design with no visible screws.
- Include one pushbutton with a backlight led.

Electrical

Power supply shall be provided by external source with 12VDC or PoE.

Environmental

VCU shall comply with at least:

- IP 54.
- Temperature range: -20 .. +60 ºC.
- Humidity range: 5-90% (non-condensing).

Physical Security

- VCU shall have no visible screws to avoid unauthorized access.
- In case the VCU is disassembled from its mounting box a warning alarm message must be sent to the SMU.
- The pushbutton shall be firmly attached and prevent extraction with external tool and avoid seize up.
- In case the door controlled by the VCU is left open or forced it shall send a warning alarm to the SMU and SM.

Interfaces

VCU shall:

- Be connected to network by standard RJ-45 connector.
- Operate one electric lock or gate through one relay with NO and NC 10A/ 24Vdc contacts.
- Monitor a door sensor to know the status of the controlled door.
- Be connected to an egress button normally open.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERERENCE	DESIGNATION
9534	MEET 1W VIDEO PANEL WITH PROXIMITY
9543	MILO 1W PANEL FLUSH BOX MEET
95181	ALLUMINIUM MILO 1W PANEL SURFACE BOX MEET

PROXIMITY READER

Description

The proximity reader shall be of compact structure and include one rfid proximity reader.

Configuration

- Proximity reader shall be configured remotely through an embedded web server.
- It shall be firmware upgradeable.

Functions

Proximity reader shall provide the following functions:

Access Control

- Activate the electric lock in different ways:
  o Validation of a resident Mifare proximity card. Each resident shall have at least one individual card that will activate the electric lock. The cards shall be alternatively defined with an expiry date. Minimum capacity shall be 100.000 users.
  o Egress button activation.
- The electric lock relay shall have a timing activation and a delay time activation.
- Disable private house alarm system for each user through their RFID card.

Lift Control

- Proximity reader shall communicate the lift control system the allowed floors for each resident with the possibility of activation of individual floors.

Events

- Generate an immediate event information for each activity to the Software Manager with date, time and proximity reader information for security record.
- Generate alarms activity (tamper, door left open, door forced) to the SMU and SM.

Characteristics

Mechanical

The proximity reader shall:

- Be mounted on its own purpose-designed metallic flush or surface mounting box.
- Have a slim aesthetic appearance, available in high resistance crystal and aluminum design with no visible screws.

Electrical

Power supply shall be provided by external source with 12VDC.

Environmental

Proximity reader shall comply with at least:

- Temperature range: -20 .. +60 ºC.
- Humidity range: 5-90% (non-condensing).

Physical Security

- Proximity reader shall have no visible screws to avoid unauthorized access.
- In case the proximity reader is disassembled from its mounting box a warning alarm message must be sent to the SMU.
- In case the door controlled by the proximity reader is left open or forced it shall send a warning alarm to the SMU and SM.

Interfaces

Proximity reader shall:

- Be connected to network by standard RJ-45 connector.
- Operate one electric lock or gate through one relay with NO and NC 10A/ 24Vdc contacts.
- Monitor a door sensor to know the status of the controlled door.
- Communicate with lift control devices to allow lift access to enabled floors to residents.
- Be connected to an egress button normally open.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERERENCE	DESIGNATION
9535	MEET PROXIMITY READER
9543	MILO 1W PANEL FLUSH BOX MEET
95181	ALLUMINIUM MILO 1W PANEL SURFACE BOX MEET

TOUCH SCREEN VIDEO VISITOR CALL UNIT

Description

The VCU shall be of compact structure and include the following elements: audio amplifier, video color camera with white led scene illumination, large capacitive touch screen and RFID proximity card reader.

Configuration

- VCU shall be configured through an embedded web server.
- VCU shall be configurable to work as a General Entrance panel, Block panel or individual panel to call one unit.
- VCU shall have audio level adjustable for speech messages.
- VCU shall have at least 11 text & speech configurable languages.
- VCU shall provide a simple way to show the current network configuration.
- Date and time shall be updated by an NTP server, Management Software or SMU.
- VCU shall be able to configure the default screen.
- VCU shall be able to configure the brightness and background color to improve visibility.
- VCU shall be configured with the available functions.
- VCU shall provide a customizable image for welcome and help screen.
- VCU shall be reset to factory settings when needed.
- VCU shall be optionally registered in a SIP server to allow extending the scope of action outside the local network. The registration status shall be viewed.
- VCU shall be firmware upgradeable.

Functions

VCU shall provide the following functions:

Information

- In standby the VCU shall show the available functions by means of icons together the date and time.
- VCU shall speech door unlocking status in local language as an aid to visitor or owner.
- A customizable help page shall show the use of each icon in local language.
- All activity of the different functions shall include graphical and text information.

Call

- Direct call to URU. Key in a digital code of 1 to 4 digits for block entrance and 5 to 7 digits for general entrance. Dialing shall be optionally combined with one letter with a configurable keypad.
- Alphanumeric call shall be available through an extra keypad that will display digits and characters from A to H.
- Call through agenda. Residents name are shown alphabetically sorted with scrolling facility. Latin and non-Latin characters should be valid.

- Call to URU shall be optionally diverted to smartphones without additional infrastructure just through a connection to internet.
- Call to SMU. Pressing dedicated icons for each SMU.
- Call filtering option, limiting the homes that are allowed to call from the VCU.
- Call mapping, allowing the use of a different call code from the address of the house.

Auto-on

- Accept call from URU, APP or from SMU, showing video. In this case, the VCU shall generate no sound. User shall be able to open audio communication at his will.

Conversation

- A timed audio and video communication with the resident's terminals, with timing information on the display.
- Alternate IP cameras shall be associated to the VCU to have different points of view from URU.

Access Control

- Activate the electric lock in different ways:
  o Command from a resident unit, smartphone or SMU in communication.
  o Validation of a resident Mifare proximity card. Each resident shall have at least one individual card that will activate the electric lock. The cards shall be alternatively defined with an expiry date. Minimum capacity shall be 100.000 users.
  o Validation of a resident face by an embedded Face Recognition engine using the camera of the VCU. Minimum capacity shall be 6.000 users. Recognition start shall be without contact.
  o Pin code introduced through the VCU keypad.
  o Egress button activation.
  o Automatic unlock through Fire Alarm system.
  o External access control system.
  o Guest pin code validated by external Access Controller.
  o QR code recognition through the integrated camera and the validation of an external controller.
- The electric lock relay shall have a timing activation and a delay time activation.
- Speech message shall be played in local language to give feedback for door lock activation.
- Alternative lock activation from indoor relay shall be provided for safety.
- Disable private house alarm system for each user through their RFID card.

Lift Control

- VCU shall communicate the lift control system the allowed floors for each visitor and resident.
- Lift control activation for residents shall be compatible with RFID, Face Recognition and App.
- The activation of the elevator control for visitors must be done from the TERMINAL or the APP.
- The PANEL will inform which elevator should be used in each situation.

Events

- Generate an immediate event information for each activity to the Software Manager with date, time, picture and VCU information for security record.
- Generate alarms activity (tamper, door left open, door forced) to the SMU and SM.

Integration

- VCU shall generate a RTSP video stream for integration with third party DVR or VMS.
- VCU shall integrate with 3rd party door controllers through two ways Wiegand interface.
- VCU shall include a reserved space for a 3rd party proximity reader and be functionally compatible.
- VCU shall be able to convert QR codes into numeric codes and send them to external controllers via Wiegand interface.

Characteristics

Audio

- Both-ways audio with automatic echo and noise cancelling.
- 1W Loudspeaker.
- Overall Loudness Rating (OLR)> 15dB.
- Acoustic distortion <1%
- Channel S/N ratio >40dB
- Idle channel noise < 32dB (A)
- Electret microphone.

Video

- Sensor: 1/3" color CMOS.
- Effective pixels 1,2 Mpixel.
- Minimum external illumination: 0 lux.
- S/N >45dB.
- Frame rate 25 fps.
- Resolution selectable (QVGA, VGA, HD).
- Auto iris.
- Auto BLC.
- View angle 120º diagonal.
- Color night vision through white led with automatic light detection.

TFT

- Size: 10,1".
- Format 16:9.

- Resolution: 600x1024 pixel.
- Colors: 16.7M.
- Contrast ratio: 800/1.
- Brightness: 300 cd/m2.
- Viewing angle: 130H/140V.
- Backlight.

Mechanical

The VCU shall:

- Be mounted on its own purpose-designed metallic flush or surface mounting box.
- Have a slim aesthetic appearance, available in high resistance PMMA and graphite color aluminum design with no visible screws.
- Have as unique user interface the touch screen.

Electrical

- Power supply shall be provided by external source with 12VDC or PoE.
- Internal heater with thermostat to protect against low temperatures shall be included.

Environmental

VCU shall comply with at least:
- IP 54.
- IK 07.
- Temperature range: -10 .. +70 ºC.
- Humidity range: 20-80% (non-condensing).

Physical Security

- VCU shall have no visible screws to avoid unauthorized access.
- In case the VCU is disassembled from its mounting box a warning alarm message must be sent to the SMU.
- In case the door controlled by the VCU is left open or forced it shall send a warning alarm to the SMU and SM.

Interfaces

VCU shall:

- Be connected to local network by standard RJ-45 connector.
- Accept integration of any commercial proximity reader through Wiegand 26 bits interface.
- Operate one electric lock or gate through one relay with NO and NC 10A/ 24Vdc contacts.

- Monitor a door sensor to know the status of the controlled door.
- Communicate with lift control devices to allow lift access to enabled floors to visitors or residents.
- Be connected to an egress button normally open.
- Be connected to a Fire Alarm system to unlock the door.
- Communicate with external relays for safe indoor lock activation and additional associated doors unlocking.
- Be connected to a third-party access controller through Wiegand-26 bit interface for embedded RFID reader and pin code keypad external validation.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERERENCE	DESIGNATION
1445	MEET KIN TOUCH PANEL
1449	MEET KIN TOUCH PANEL
95161	ALLUMINIUM MEET KIN TOUCH PANEL
9513	KIN MEET RAIN HOOD

VANDAL PROOF VISITOR CALL UNIT

Description

The VCU shall be of stainless-steel compact structure and include the following elements: audio amplifier, video color camera with white led scene illumination, informative display with agenda, mechanical keypad and RFID proximity card reader. It shall provide aids for visual deficiency.

Configuration

- VCU shall be configured through an embedded web server.
- VCU shall be configurable to work as a General Entrance panel, Block panel or individual panel to call one unit.
- VCU shall have audio level adjustable for speech messages.
- VCU shall have at least 12 text & speech configurable languages.
- VCU shall provide a simple way to show the current network configuration.
- Date and time shall be updated by an NTP serve, Management Software or SMU.
- VCU shall be customizable with an image to provide additional user information.
- VCU shall be configured with the available functions.
- VCU shall be reset to factory parameters when needed.
- VCU shall be optionally registered in a SIP server to allow extending the scope of action outside the local network. The registration status shall be viewed.
- VCU shall be firmware upgradeable.

Functions

VCU shall provide the following functions:

Information

- In standby the VCU shall show information in local language regarding the use for the visitor together the date and time.
- VCU shall provide in standby customized image on display for user's information.
- VCU shall provide a sorted list of residents to facilitate the call.
- VCU shall speech door unlocking status in local language as an aid to visitor or owner.
- VCU shall provide a customizable help showing the usage of each icon in the local language.
- VCU shall provide iconic information according to conversation status (calling, answering, unlocking, busy) as an aid to hearing impaired people.
- Distinctive pushbuttons shall be identified for blind people.
- Available functions shall be selectable in a graphical menu on display.

Call

- Direct call to URU. Key in a digital code of 1 to 4 digits for block entrance and 5 to 7 digits for general entrance.
- Call through agenda. Residents name are shown alphabetically sorted with scrolling facility.

- Call to URU shall be optionally diverted to smartphones without additional infrastructure just through a connection to internet.
- Call to SMU. Key in a digital code of 4 digits or just press the bell push-button.

Auto-on

- Accept call from URU, APP or from SMU. In this case, the VCU shall generate no sound. User shall be able to open audio communication at his will.

Conversation

- A timed audio and video communication with the resident's terminals, with timing information on the display.
- Alternate IP cameras shall be associated to the VCU to have different points of view from URU.

Access Control

- Activate the electric lock in different ways:
  o Command from a resident unit, smartphone or SMU in communication.
  o Validation of a resident Mifare proximity card. Each resident shall have at least one individual card that will activate the electric lock. The cards shall be alternatively defined with an expiry date. Minimum capacity shall be 100.000 users.
  o Validation of a resident face by an embedded Face Recognition engine using the camera of the VCU. Minimum capacity shall be 6.000 users. Recognition start shall be without contact.
  o Pin code introduced through the VCU keypad.
  o Egress button activation.
  o Unlock in case of Fire Alarm situation.
  o External access control system.
  o Guest pin code validated by external Access Controller.
  o QR code recognition through the integrated camera and the validation of an external controller.
- The electric lock relay shall have a timing activation and a delay time activation.
- Speech message shall be played in local language to give feedback for door lock activation.
- Alternative lock activation from indoor relay shall be provided for safety.
- Disable private house alarm system for each user through their RFID card.

Lift Control

- VCU shall communicate the lift control system the allowed floors for each visitor and resident.
- Lift control activation for residents shall be compatible with RFID, Face Recognition and App.
- The activation of the elevator control for visitors must be done from the TERMINAL or the APP.
- The PANEL will inform which elevator should be used in each situation.

Events

- Generate an immediate event information for each activity to the Software Manager with date, time and VCU information for security record.
- Generate alarms activity (tamper, door left open, door forced) to the SMU and SM.

Integration

- VCU shall generate a RTSP video stream for integration with third party DVR or VMS.
- VCU shall integrate with 3rd party door controllers through two ways Wiegand interface.
- VCU shall include a reserved space for a 3rd party proximity reader and be functionally compatible.
- VCU shall be able to convert QR codes into numeric codes and send them to external controllers via Wiegand interface.

Characteristics

Audio

- Both-ways audio with automatic echo and noise cancelling.
- 1W Loudspeaker.
- Overall Loudness Rating (OLR)> 15dB.
- Acoustic distortion <1%
- Channel S/N ratio >40dB
- Idle channel noise < 32dB (A)
- Electret microphone.

Video

- Sensor: 1/3" color CMOS.
- Effective pixels 1,3 Mpixel.
- Minimum external illumination: 0 lux.
- S/N >45dB.
- Frame rate 25 fps.
- Resolution selectable (QVGA, VGA, HD).
- Auto iris.
- Auto BLC.
- View angle 128º H, 70º V.
- Color night vision through white led with automatic light detection.

TFT

- Size: 4,3".
- Format 16:9.
- Resolution: 480x272 pixel.
- Colors: 16.7M.

- Contrast ratio: 400/1.
- Brightness: 200 cd/m2.
- Viewing angle: 100H/90V.
- Backlight: 6 leds.
- Presence detection at 0,5m to switch on the TFT and preserve its range live.

Mechanical

The VCU shall:

- Be made of stainless steel AISI 316L material, 3 mm thickness.
- Be mounted on its own purpose-designed metallic flush or surface mounting box.
- []Use vandal proof screws. []Have no visible screws
- Have a 4x3 matrix keys made of resistant chromed Zamak and backlight led illumination.
- Have the TFT protected with resistant polycarbonate.
- Allow integration of a proximity reader

Electrical

Power supply shall be provided by external source with 12VDC or by PoE.

Environmental

VCU shall comply with at least:
- IP 65.
- IK 09.
- Temperature range: -40 .. +70 ºC.
- Humidity range: 20-80% (non-condensing).

Physical Security

- []VCU shall have no visible screws to avoid unauthorized access.
- In case the VCU is disassembled from its mounting box a warning alarm message must be sent to the SMU.
- All pushbuttons shall be firmly attached and prevent extraction with external tool and avoid seize up.
- In case the door controlled by the VCU is left open or forced it shall send a warning alarm to the SMU and SM.

Interfaces

VCU shall:

- Be connected to local network by standard RJ-45 connector.

- Accept integration of any commercial proximity reader through a Wiegand 26 bits interface.
- Operate one electric lock or gate through one relay with NO and NC 10A/ 24Vdc contacts.
- Monitor a door sensor to know the status of the controlled door.
- Communicate with lift control devices to allow lift access to enabled floors to visitors or residents.
- Be connected to an egress button normally open.
- Be connected to a Fire Alarm system to unblock the door.
- Communicate with external relays for safe indoor lock activation and additional associated doors unlocking.
- Be connected to a third-party access controller through Wiegand-26 bit interface for embedded RFID reader external validation.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERERENCIA	DESIGNACIÓN
1455	MARINE DIGITAL VIDEO PANEL MEET
1456	MARINE DIRECTORY PANEL MEET
1459	MARINE PANEL FLUSH BOX MEET
1458	MARINE PANEL SURFACE BOX MEET
14591	MEET FLUSH BOX JOINING BOLTS SET
1457	MEET MARINE PANEL RAIN HOOD

<u>USER RECEIVER UNITS (URU)</u>

7" BASIC MONITOR

Description
The URU shall be fully functional using the touch screen with all the options at glance for easiest of use.

Configuration
- URU shall be configurable locally through a user and installer's menu using the touch screen and remotely through an embedded web server. Access shall be password protected.
- Text messages shall be shown in local language. At least 10 languages shall be available by default.
- Date & time shall be updated by NTP server, Management Software or SMU.
- Smartphones shall be paired with URU for call divert without requiring any additional programming device.
- IP cameras shall be associated to watch them from URU. Each camera shall have an associated relay for door unlocking.
- On screen available user functions shall be enabled for each project.
- Factory settings shall be possible to set.
- URU shall be optionally registered in a SIP server to allow extending the scope of action outside the local network. The registration status shall be viewed.
- User shall be able to:
  - o Change appearance color at any moment.
  - o Select melodies associated to each call source and the volume.
  - o Set the do not disturb mode temporarily or deactivate it. When activated a dedicated led shall indicate the status.
  - o Change call divert account password from URU.
- URU shall be firmware upgradeable.

Functions
URU shall provide the following functions:

<u>Call reception</u>

Calls can be originated from VCU, SMU or other URU, from different or same house, and shall comply with:

- User shall accept or reject the received call. He will have 30 seconds to do it, with a countdown on-screen counter.
- During conversation user shall be able to adjust audio volume level and microphone mute.
- Conversation time shall be shown on screen and shall be limited to two minutes to avoid hear private home conversations by mistake.

- URU shall capture automatically a picture every time there is a video call reception if function is enabled.
- User shall be able to capture additional pictures manually.
- Pictures shall be able to be later reviewed with information of origin, date and time.
- Caller id: User shall know from where the call is originated with customized clear text description and individual and configurable melody for each source.
- User shall be able to unlock the door of the access that made the call.
- Alternative doors associated to the calling VCU shall be possible to be unlocked during conversation.
- Alternative cameras associated to the calling VCU shall be possible to be monitored during conversation.
- Registry of received and sent calls of at least 60 records with status indication of missed call, informing origin, time and date of call.
- Missed calls shall be signaled by an illuminated icon.

Call divert

- URU shall divert the received calls from VCU and SMU to at least 8 associated smartphones or tablets with an appropriate App available for android and iOS operating systems.
- Call reception in these smart devices shall be possible through 3G/4G/5G and WIFI networks.

Call to SMU

- URU shall be able to send calls to selected SMU by selecting them in a dedicated menu with clear description of each unit.
- If the SMU is not available, a pop-up text shall inform about this situation or alternatively a voice message shall be left.

SOS Call

- Resident shall be able to send panic priority calls to special SMU by pressing an external switch tied to the URU.
- External switch activation shall not produce any sound.

Auto-on

- URU shall be able to communicate with different VCU on its domain by selecting them in a dedicated menu with clear description of each unit.
- If the VCU is not available, a pop-up text shall inform about this situation.
- Available options shall be the same as in the case of call reception.

CCTV

- URU shall be able to communicate with different IP CCTV cameras on its domain.
- Cameras shall be compatible with IP RTSP protocol and configured previously by installer.
- Cameras shall have an optional associated relay for lock release or other alternative function.

Intercom

- URU shall be able to send calls to other homes dialing the unit number.
- URU shall be able to send calls to other URU in same apartment selecting it from a list.

Lift Control

- URU shall communicate with the lift control system to request the lift to go down or go up before the resident leaves home with a simple touch activation.
- URU shall send the lift to the lobby from where the visitor has made the call to grant him the access and then to the resident's floor or alternative floor.

Doorbell function

- It shall be possible to connect an external push button to the URU for doorbell function.
- It shall be possible to show the image from an IP CCTV camera associated to the doorbell.

Text messages

- URU shall be able to receive text messages from Software Management.
- Received messages shall be stored in a Message Inbox with a capacity of at least 64 messages.
- Pending to read received messages state shall be signaled through a dedicated LED.

Alarms

- URU shall manage at least 7 zone sensors with activation configurable as NO, NC or anti-sabotage.
- URU shall manage an external siren through an output to signal alarm situations.
- Zones shall be trigger-configurable as instantaneous or delayed, with a variable delay time.
- Each zone must be freely selected for a different purpose: IR, smoke, gas, door sensor, panic, tamper, flood to advice the SMU on the origin of the alarm.
- The user shall use a personal pin code to disarm the alarm system and to reset the siren activation. An additional personal distress pin code shall be available to advice the SMU on a distress situation where the owner is forced to deactivate the alarm system.
- Alarm setting shall be extremely simple with three different scenarios: Home, Sleep and Out.
- URU shall show the current alarm status.
- Home scenario shall be set from the VCU using a RFID card.

Events

- URU shall generate an immediate event information for each activity to the Management Software with date, time and URU information for security record.

Status

- URU shall show through individual icons at least the following status:

- o Network connection.
- o Alarm setting.
- o Missed calls.
- o Message reception.
- o Do not disturb mode activated.

Home Automation

URU shall manage at least 8 local relays for in-house activations or reactivations using the touch screen.

Characteristics

Audio

- Both-ways audio with automatic echo and noise cancelling.
- 1W loudspeaker.
- Overall Loudness Rating (OLR)> 27dB.
- Acoustic distortion <1%
- Channel S/N ratio >40dB
- Idle channel noise < 32dB (A)
- Ringtone Sound Pressure level >80dB (A)
- Electret microphone.
- Audio level adjustment in 6 steps.

TFT

- Size: 7".
- Format 16:9.
- Resolution: 800x480 pixel.
- Colors: 16.7M.
- Contrast ratio: 400/1.
- Brightness: 200cd/m2.
- Viewing angle: 90ºH/75ºV.
- Backlight: led.
- Capacitive touch screen technology.
- Video image:
  - o Selectable according to incoming video (QVGA, VGA).
  - o Frame rate: 25 fps

Mechanical

The URU shall:

- Be composed of two parts: connector and monitor.
- All wiring shall be connected to the monitor.

Monitor shall:

- Have a clear and flat front surface without openings neither moving parts.
- Have no mechanical push-buttons for a better look and feel, being all it interfaced through capacitive screen.
- Have at least 3 status icons with led backlight.
- Be available in white color.
- Standout no more than18 mm from the wall.

Electrical

Power supply shall be provided by external source with 12VDC or PoE.

Environmental

URU shall comply with at least:
- IP 30.
- IK 04.
- Temperature range: -10 .. +55 ºC.
- Relative humidity range: 20 – 85% (non-condensing).

Physical Security

- URU shall be secured by a tamper switch to detect off-hook and give tamper alarm to the SMU.

Interfaces

URU shall:

- Have an intuitive graphical user interface with simple labeled icons with all options at sight.
- Be connected to local network by standard RJ-45 connector.
- Monitor a doorbell push-button and generate melody when activated.
- Monitor a panic distress button or external sensor sending "warning" messages to SMU and Software management.
- Communicate with lift control devices to send the lift to the hall to welcome visitors or to the resident's floor before leaving house, with lift status information on floor situation and moving sense.
- Have 7 zones direct alarm connection to manage configurable sensors with sabotage detection.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERERENCE	DESIGNATION
14501	NEO 7" MONITOR POE WHITE MEET
9541	NEO/WIT MONITOR CONNECTOR MEET
1485	MEET MONITOR DESKTOP SUPPORT

7" ADVANCED MONITOR

Description

The URU shall be fully functional using the touch screen with all the options at glance for easiest of use.

Configuration

- URU shall be configurable locally through a user and installer's menu using the touch screen and remotely through an embedded web server. Access shall be password protected.
- Text messages shall be shown in local language. At least 10 languages shall be available by default.
- Date & time shall be updated by NTP server, Management Software or SMU.
- Smartphones shall be paired with URU for call divert without requiring any additional programming device.
- IP cameras shall be associated to watch them from URU. Each camera shall have an associated relay for door unlocking.
- Third-party Apps shall be uploaded for integration with other systems.
- On screen available user functions shall be enabled for each project.
- Factory settings shall be possible to set.
- URU shall be optionally registered in a SIP server to allow extending the scope of action outside the local network. The registration status shall be viewed.
- User shall be able to:
  o Change appearance color at any moment.
  o Select melodies associated to each call source and the volume.
  o Set the do not disturb mode temporarily or deactivate it. When activated a dedicated led shall indicate the status.
  o Change call divert account password from URU.
- URU shall be firmware upgradeable.

Functions

URU shall provide the following functions:

<u>Call reception</u>

Calls can be originated from VCU, SMU or other houses and shall comply with:

- User shall accept or reject the received call. He will have 30 seconds to do it, with a countdown on-screen counter.
- During conversation user shall be able to adjust audio volume level and microphone mute.
- Conversation time shall be shown on screen and shall be limited to two minutes to avoid hear private home conversations by mistake.
- URU shall capture automatically a picture every time there is a video call reception, if function is enabled.
- User shall be able to capture additional pictures during conversation.

- Pictures shall be able to be later reviewed with information of origin, date and time.
- Pictures shall be able to export to micro-SD card.
- Caller id: User shall know from where the call is originated with customized clear text description and individual and configurable melody for each source.
- User shall be able to unlock the door of the access that made the call.
- Alternative doors associated to the calling VCU shall be possible to be unlocked during conversation.
- Alternative cameras associated to the calling VCU shall be possible to be monitored during conversation.
- Registry of received and sent calls of at least 60 records with status indication of missed call, informing origin, time and date of call.
- Missed calls shall be signaled by an illuminated icon.
- Optionally it shall be possible activate automatic answer for people with some disability.

Call divert

- URU shall divert the received calls from VCU and SMU to at least 8 associated smartphones or tablets with an appropriate App available for android and iOS operating systems.
- Call reception in these smart devices shall be possible through 3G/4G/5G and WIFI networks.

Call to SMU

- URU shall be able to send calls to different SMU by selecting them in a dedicated menu with clear description of each unit.
- If the SMU is not available, a pop-up text shall inform about this situation or alternatively a voice message shall be left.

SOS Call

- Resident shall be able to send panic priority calls to special SMU by pressing an external switch tied to the URU.
- External switch activation shall not produce any sound.

Auto-on

- URU shall be able to communicate with different VCU on its domain by selecting them in a dedicated menu with clear description of each unit.
- If the VCU is not available, a pop-up text shall inform about this situation.
- Available options shall be the same as in the case of call reception.

CCTV

- URU shall be able to communicate with different IP CCTV cameras on its domain.
- Cameras shall be compatible with IP RTSP protocol and configured previously by installer.
- Cameras shall have an optional associated relay for lock release or other alternative function.

Intercom

- URU shall be able to send calls to other homes dialing the unit number.
- URU shall be able to send calls to other URU in same apartment selecting it from a list.
- URU shall be able to make SIP calls to other extensions registered in the same SIP server.

Lift Control

- URU shall communicate with the lift control system to request the lift to go down or go up before the resident leaves home with a simple touch activation.
- URU shall send the lift to the lobby from where the visitor has made the call to grant him the access and then to the resident's floor or alternative floor.

Doorbell function

- It shall be possible to connect an external push button to the URU for doorbell function.
- It shall be possible to show the image from an IP CCTV camera associated to the doorbell.

Text messages

- URU shall be able to receive text messages from Software Management.
- Received messages shall be stored in a Message Inbox with a capacity of at least 64 messages.
- Pending to read received messages state shall be signaled through a dedicated LED.

Alarms

- URU shall manage at least 15 zone sensors with activation configurable as NO, NC or anti-sabotage.
- URU shall manage an external siren through an output to signal alarm situations.
- Zones shall be trigger-configurable as instantaneous or delayed, with a variable delay time.
- Each zone must be freely selected for a different purpose: IR, smoke, gas, door sensor, panic, tamper, flood in order to advice the SMU on the origin of the alarm.
- The user shall use a personal pin code to disarm the alarm system and to reset the siren activation. An additional personal distress pin code shall be available to advice the SMU on a distress situation where the owner is forced to deactivate the alarm system.
- Alarm setting shall be extremely simple with three different scenarios: Home, Sleep and Out.
- URU shall show the current alarm status.
- Home scenario shall be set from the VCU using a RFID card.

Events

- URU shall generate an immediate event information for each activity to the Management Software with date, time and URU information for security record.

Status

- URU shall show through individual icons at least the following status:
    o Network connection.
    o Alarm setting.
    o Missed calls.
    o Message reception.
    o Do not disturb mode activated.

Home Automation

- URU shall manage at least 8 local relays for in-house activations or reactivations using the touch screen.
- URU shall communicate with web server services and third-party ad-hoc App.

Characteristics

Audio

- Both-ways audio with automatic echo and noise cancelling.
- 1W loudspeaker.
- Overall Loudness Rating (OLR)> 27dB.
- Acoustic distortion <1%
- Channel S/N ratio >40dB
- Idle channel noise < 32dB (A)
- Ringtone Sound Pressure level >80dB (A)
- Electret microphone.
- Audio level adjustment in 6 steps.

TFT

- Size: 7".
- Format 16:9.
- Resolution: 1024x600 pixel.
- Colors: 16.7M.
- Contrast ratio: 500/1.
- Brightness: 200cd/m2.
- Viewing angle: 160H/130V.
- Backlight: led.
- Capacitive touch screen technology.
- Video image:
    o Selectable according to incoming video (QVGA, VGA, HD).
    o Frame rate: 25 fps

Mechanical

The URU shall:

- Be composed of two parts: connector and monitor.
- All wiring shall be connected to the monitor.

Monitor shall:

- Have a clear and flat front surface without openings neither moving parts.
- Have a robust metallic frame.
- Have no mechanical push-buttons for a better look and feel, being all it interfaced through capacitive screen.
- Have at least 3 status icons with led backlight.
- Be available in white, black and gold color.
- Standout no more than 20mm from the wall.

Electrical

Power supply shall be provided by external source with 12VDC or through PoE.

Environmental

URU shall comply with at least:
- IP 30.
- IK 04.
- Temperature range: -20 .. +50 ºC.
- Relative humidity range: 5 – 90% (non-condensing).

Physical Security

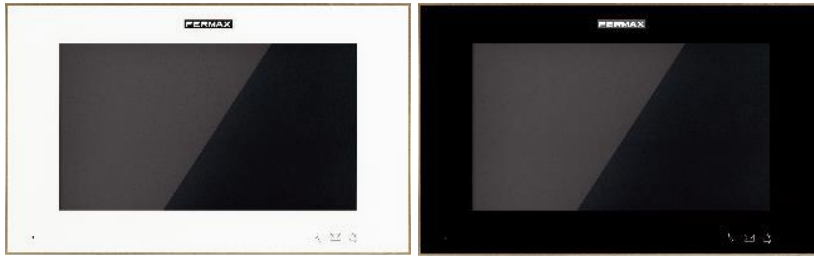- URU shall be secured by a tamper switch to detect off-hook and give tamper alarm to the SMU.

Interfaces

URU shall:

- Have an intuitive graphical user interface with simple labeled icons with all options at sight.
- Be connected to local network by standard RJ-45 connector.
- Monitor a doorbell push-button and generate melody when activated.
- Monitor a panic distress button or external sensor sending "warning" messages to SMU and Software management.
- Communicate with lift control devices to send the lift to the hall to welcome visitors or to the resident's floor before leaving house, with lift status information on floor situation and moving sense.

- Have 7 zones direct alarm connection to manage configurable sensors with sabotage detection and option to connect to 16 zones alarm management module through RS-485.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERERENCE	DESIGNATION
14721	WIT 7" PoE WIT MONITOR WHITE
14723	WIT 7" PoE WIT MONITOR BLACK
9541	MIO/WIT MONITOR CONNECTOR MEET
1485	MEET MONITOR DESKTOP SUPPORT

10" HOME AUTOMATION MONITOR

Description

The URU shall be fully functional using the touch screen with all the options at glance for easiest of use.

Configuration

- URU shall be configurable locally through a user and installer's menu using the touch screen and remotely through an embedded web server. Access shall be password protected.
- Text messages shall be shown in local language. At least 10 languages shall be available by default.
- Date & time shall be updated by NTP server, Management Software or SMU.
- Smartphones shall be paired with URU for call divert to his home without requiring any additional programming device.
- IP cameras shall be associated to watch them from URU. Each camera shall have an associated relay for door unlocking.
- Third-party Apps shall be uploaded for integration with other systems.
- On screen available user functions shall be enabled for each project.
- Factory settings shall be possible to set.
- URU shall be optionally registered in a SIP server to allow extending the scope of action outside the local network. The registration status shall be viewed
- User shall be able to:
    - o Change appearance color at any moment.
    - o Select melodies associated to each call source and the volume.
    - o Set the do not disturb mode temporarily or deactivate it. When activated a dedicated led shall indicate the status.
    - o Change call divert account password from URU.
- URU shall be firmware upgradeable.

Functions

URU shall provide the following functions:

<u>Call reception</u>

Calls can be originated from VCU or SMU or other houses and shall comply with:

- User shall accept or reject the received call. He will have 30 seconds to do it, with a countdown on-screen counter.
- During conversation user shall be able to adjust audio volume level and microphone mute.
- Conversation time shall be shown on screen and shall be limited to two minutes to avoid hear private home conversations by mistake.
- URU shall capture automatically a picture every time there is a video call reception.
- User shall be able to capture additional pictures during conversation , if function is enabled.
- Pictures shall be able to be later reviewed with information of origin, date and time.

- Pictures shall be able to export to micro-SD card.
- Caller id: User shall know from where the call is originated with customized clear text description and individual and configurable melody for each source.
- User shall be able to unlock the door of the access that made the call.
- Alternative doors associated to the calling VCU shall be possible to be unlocked during conversation.
- Alternative cameras associated to the calling VCU shall be possible to be monitored during conversation.
- Registry of received and sent calls of at least 60 records with status indication of missed call, informing origin, time and date of call.
- Missed calls shall be signaled by an illuminated icon.
- Optionally it shall be possible activate automatic answer for people with some disability.

Call divert

- URU shall divert the received calls from VCU and SMU to up to 8 associated smartphones or tablets with an appropriate App available for android and iOS operating systems.
- Call reception in these smart devices shall be possible through 3G/4G/5G and WIFI networks.

Call to SMU

- URU shall be able to send calls to different SMU by selecting them in a dedicated menu with clear description of each unit.
- If the SMU is not available, a pop-up text shall inform about this situation or alternatively a voice message shall be left.

SOS Call

- Resident shall be able to send panic priority calls to special SMU by pressing an external switch tied to the URU.
- External switch activation shall not produce any sound.

Auto-on

- URU shall be able to communicate with different VCU on its domain by selecting them in a dedicated menu with clear description of each unit.
- If the VCU is not available, a pop-up text shall inform about this situation.
- Available options shall be the same as in the case of call reception.

CCTV

- URU shall be able to communicate with different IP CCTV cameras on its domain.
- Cameras shall be compatible with IP RTSP protocol and configured previously by installer.
- Cameras shall have an optional associated relay for lock release or other alternative function.

Intercom

- URU shall be able to send calls to other homes dialing the unit number.
- URU shall be able to send calls to other URU in same apartment selecting it from a list.
- URU shall be able to make SIP calls to other extensions registered in the same SIP server.

Lift Control

- URU shall communicate with the lift control system to request the lift to go down or go up before the resident leaves home with a simple touch activation.
- URU shall send the lift to the lobby from where the visitor has made the call to grant him the access and then to the resident's floor or alternative floor.

Doorbell function

- It shall be possible to connect an external push button to the URU for doorbell function.
- It shall be possible to show the image from an IP CCTV camera associated to the doorbell.

Text messages

- URU shall be able to receive text messages from Software Management.
- Received messages shall be stored in a Message Inbox with a capacity of at least 64 messages.
- Pending to read received messages state shall be signaled through a dedicated LED.

Alarms

- URU shall manage at least 15 zone sensors with activation configurable as NO, NC or anti-sabotage.
- URU shall manage an external siren through an output to signal alarm situations.
- Zones shall be trigger-configurable as instantaneous or delayed, with a variable delay time.
- Each zone must be freely selected for a different purpose: IR, smoke, gas, door sensor, panic, tamper, flood in order to advice the SMU on the origin of the alarm.
- The user shall use a personal pin code to disarm the alarm system and to reset the siren activation. An additional personal distress pin code shall be available to advice the SMU on a distress situation where the owner is forced to deactivate the alarm system.
- Alarm setting shall be extremely simple with three different scenarios: Home, Sleep and Out.
- URU shall show the current alarm status.
- Home scenario shall be set from the VCU using a RFID card.

Events

- URU shall generate an immediate event information for each activity to the Management Software with date, time and URU information for security record.

Status

- URU shall show through individual icons at least the following status:

- o Network connection.
- o Alarm setting.
- o Missed calls.
- o Message reception.
- o Do not disturb mode activated.

Home Automation

- URU shall manage at least 8 local relays for in-house activations or reactivations using the touch screen.
- URU shall communicate with web servers services through independent ethernet network and third-party App.

Characteristics

Audio

- Both-ways audio with automatic echo and noise cancelling.
- 1W loudspeaker.
- Overall Loudness Rating (OLR)> 27dB.
- Acoustic distortion <1%
- Channel S/N ratio >40dB
- Idle channel noise < 32dB (A)
- Ringtone Sound Pressure level >80dB (A)
- Electret microphone.
- Audio level adjustment in 6 steps.

TFT

- Size: 10".
- Format 16:9.
- Resolution: 1024x600 pixel.
- Colors: 16.7M.
- Contrast ratio: 500/1.
- Brightness: 220cd/m2.
- Viewing angle: 120H/110V.
- Backlight: led.
- Capacitive touch screen technology.
- Video image:
  - o Selectable according to incoming video (QVGA, VGA, HQ).
  - o Frame rate: 25 fps

Mechanical

The URU shall:

- Be composed of two parts: connector and monitor.
- All wiring shall be connected to the monitor.

Monitor shall:

- Have a clear and flat front surface without openings neither moving parts.
- Have a robust metallic frame.
- Be installed on surface or recessed.
- Have no mechanical pushbuttons for a better look and feel, being all of it interfaced through the capacitive screen.
- Have at least 3 status icons with led backlight.
- Be available in white, black and gold color.
- Standout no more than 20mm from the wall.

Electrical

Power supply shall be provided by external source with 12VDC or through PoE.

Environmental

URU shall comply with at least:
- IP 30.
- IK 04.
- Temperature range: -20 .. +50 ºC.
- Relative humidity range: 5 – 90% (non-condensing).

Physical Security

- URU shall be secured by a tamper switch to detect off-hook and give tamper alarm to the SMU.

Interfaces

URU shall:

- Have an intuitive graphical user interface with simple labeled icons with all options at sight.
- Be connected to local intercom installation network by standard RJ-45 connector.
- Be connected to local in-home devices by standard RJ-45 connector (DHCP) isolated from installation connector.
- Monitor a doorbell push button and generate melody when activated.
- Monitor a panic distress button or external sensor sending "warning" messages to SMU and Software management.

- Communicate with lift control devices to send the lift to the hall to welcome visitors or to the resident's floor before leaving house, with lift status information on floor situation and moving sense.
- Have 7 zones direct alarm connection to manage configurable sensors with sabotage detection and option to connect to 16 zones alarm management module through RS-485.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

	DESIGNATION
REFERERENCE	
14831	WIT 10" HOME AUTOMATION MONITOR POE WHITE
14833	WIT 10" HOME AUTOMATION MONITOR POE BLACK
9541	MIO/WIT MONITOR CONNECTOR MEET
1489	MONITOR FLUSH BOX MEET
1485	MEET MONITOR DESKTOP SUPPORT

MANAGEMENT UNITS

SECURITY MANAGEMENT UNIT (SMU)

Description

The SMU shall provide all the functionalities required by the security staff. It shall include a touch screen and handset in a single standalone furniture.

Configuration

- SMU shall be configurable remotely through an embedded web server. Access shall be password protected.
- SMU shall be configured as belonging to a block or to the entire condominium, receiving and generating calls accordingly.
- Text messages shall be shown in local language. At least 10 languages shall be available by default.
- The operating mode shall be configured dynamically by the user (guardian).
- It shall be optionally registered in a SIP server to allow extending the scope of action outside the local network. The registration status can be viewed.
- Date & time shall be updated by NTP server or Management Software.
- User shall be able to select call melodies and itsvolume.
- Video characteristics (brightness) shall be configurable.
- Factory reset shall be set when needed.

Functions

SMU shall provide the following functions:

Information

- In standby SMU shall show the available functions by means of icons and the date and time.
- Missed calls shall be indicated by a light signal, a text message and the information in the event list.

Call reception

Calls can be originated from VCU, URU, APP or another SMU and shall comply with:

- During conversation user shall be able to adjust audio volume level and microphone mute.
- If the source has video capability the SMU shall show the image captured by the source camera.
- Conversation time shall be limited to two minutes to avoid hear private conversations by mistake.
- SMU shall capture automatically a picture every time there is a call reception from VCU if it is enabled.
- User shall be able to capture pictures during conversation.

- Audio and video conversation shall be optionally recorded for later review.
- Pictures shall be able to be later reviewed with information of origin, date and time.
- Caller id: User shall know from where the call is originated with clear customized text description and configurable melody.
- User shall be able to unlock the door of source VCU.
- Other doors associated with the PANEL shall be opened during the conversation.
- IP cameras associated with the PANEL shall be viewed during the conversation to have another point of view.
- A registry of received and sent calls with status indication of missed call, informing origin, time and date of call with a minimum capacity of 64 calls.

Call generation

- SMU shall be able to send calls to different URU and SMU on the installation introducing their logical address (block and unit).
- Alphanumeric call. There shall be an additional keypad that allows dial digits and letters from A to H.
- Call through agenda. Resident names shall be displayed in alphabetical order with the option to scroll the list to find the desired resident. Both Latin and non-Latin characters must be able to be used.
- If the SMU has associated an IP camera the video stream shall be transmitted synchronously with the audio.
- Call filtering option, limiting the homes that are allowed to call from the PANEL.
- Call mapping, allowing the use of a different call code from the home address.

Conversation

- Audio and video communication with the TERMINALS and PANELS, with talk time information on the screen.
- IP video cameras associated with the PANEL shall be able to be selected from the GUARD UNIT to have different points of view.
- Notice of incoming call from another PANEL, TERMINAL or GUARD UNIT during the conversation with another device.

Auto-on

- SMU shall be able to communicate with any block or general entrance VCU on the installation introducing their logical address (block and unit).
- Available options shall be the same as in the case of call reception.

Call forwarding

- Should SMU receive a call from VCU, it can put it on hold and call the destination URU, hold a conversation with it and put the VCU in communication with the URU if the resident so decides.

- SMU can also forward the call from the VCU directly to the URU without a prior conversation between the SMU and URU.
- SMU may activate a forwarding mode, in case the user is absent, to another SMU, diverting all calls received to the second SMU.
- SMU may activate a forwarding mode, in the event of the user's absence, to an associated smartphone or tablet, through a suitable application available for Android and iOS operating systems. All calls received at the SMU will be forwarded automatically.

Lift control

- SMU shall notify the elevator control system of the floor allowed for each visitor.

Answering machine

- SMU shall register voice and video messages from visitors in front of VCU or audio messages from residents in front of their URU in case there is no answer to their call.

Alarms

- SMU shall receive alarm messages from any house and VCU in the installation.
- A led and special melody shall indicate the alarm reception.
- Alarm messages shall identify unambiguously the source of the alarm, date, hour and the triggered zone or distress (URU) or event (VCU).
- A list of at least last 450 incoming alarms shall be kept in a log.

Events

- SMU shall register a queue with the last received calls with at least 64 elements with information about origin, date and time. Events could be deleted by user.
- SMU shall register a queue with the last received alarms with at least 64 elements with information about origin, type, date and time. Events shall not be deleted by user.
- SMU shall generate an immediate event information for each activity to the Management Software with date, time and SMU information for security record.

Mode selection

- SMU shall allow selecting the operating mode to intercept calls from the VCUs to the USUs and allow the reception of calls from the URUs, with at least 3 modes: NIGHT (no reception), MIXED (reception if there is no answer from the called URU) and DAY (always receive).

Status

- SMU shall show through individual icons at least the following status:
    o Network disconnection.
    o Alarm reception.
- Missed calls shall be announced with a text on screen.

Characteristics

Audio

- Both-ways audio with automatic echo and noise cancelling.
- Hands-free and handset communication.
- 1W loudspeaker.
- Overall Loudness Rating (OLR)> 23,5dB (handsfree), 10,5dB (handset).
- Acoustic distortion <2%
- Channel S/N ratio >40dB
- Idle channel noise < 43dB (A)
- Ringtone Sound Pressure level >80dB (A)
- Electret microphone.
- Conversation audio recording.
- Audio level adjustment in 6 steps.

TFT

- Size: 10,1".
- Format 16:9.
- Resolution: 1024x600 pixel.
- Colors: 16.7M.
- Contrast ratio: 800/1.
- Brightness: 300cd/m2.
- Viewing angle: 140H/120V.
- Backlight: led.
- Capacitive touch screen technology.

Video

- Support for external IP cameras for video transmission to the URU.
- Incoming VCU video display.
- Video recording in case of no answer.

Mechanical

The SMU shall:

- Be composed of two parts: stand foot and monitor.
- All wiring shall be connected to the monitor.
- Foot shall provide a 45º inclination to the monitor for a perfect visibility.

Monitor shall:

- Include one SD card slot.
- Have a clear and flat front surface without openings.

- Have no mechanical pushbuttons for a better look and feel, being all it interfaced through touch screen.
- Have a handset to switch between handsfree and private communication.

Electrical

Power supply shall be provided by external source with 12VDC or PoE.

Environmental

SMU shall comply with at least:

- IP 30.
- IK 04.
- Temperature range: -10 .. +55 ºC.
- Relative humidity range: 20 – 93% (non-condensing).

Interfaces

SMU shall:

- Have an intuitive graphical user interface with simple labeled icons with all options at sight.
- Be connected to network by standard RJ-45 connector.
- Have an SD card slot for audio and video conversation recording and answering machine function.

 [THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERENCE: 95391

DESIGNATION: MEET DESKTOP GUARD UNIT

MANAGEMENT SOFTWARE

Description

The MS shall provide all the functionalities required by the system administrator. It shall be a dedicated software to have option to integrate other property management systems like CCTV or administration apps.

Functions

MS shall provide the following functions:

Messages

The MS shall be able to send text messages to URU. Destination shall be individually selected or by groups.

An error list with all the receivers that have not received the message shall be shown.

Alarm Reception

MS shall receive alarms from:

- VCUs: Tamper and door left open or forced alarms.
- URU: zone alarm, panic call, tamper and distress alarm.

An automatic log shall be shown with all the details of the alarm and alarming sound that will stop when the user acknowledges the alarm reception.

Events

- MS shall register all the activity of the devices in the installation, with date, time, picture and all the details involved:
   o Calls
   o Alarms: Status change, triggers, disconnections, distress
   o Door opening: from URU, SMU, proximity card.
   o Text messages sent.
- Access to this information shall be protected and available only to the administrator.
- Events shall be filtered by date in order to facilitate the search of the information.
- Events shall be optionally exported to an Excel file.

Offline devices

MS shall show automatically on screen if there are offline devices due to a network or device problem (VCU, URU, SMU). Also, MS shall provide a feature to search online and of line devices.

Administration

Administrator shall be able to create and maintain the list of residents with the information for access control credentials (rfid card code, user face picture for FR or pin code) and permissions. This information shall be updated in all the related VCU.

Characteristics

Operating

The MS shall:

- Be compatible with Windows 7, 8 and 10; 32 and 64 bits operating systems.
- Require no more than 1GB ram memory.
- Use an embedded data base to avoid conflict with other data bases running in the same PC.
- Include an NTP server to update date & time on all the devices.
- Record all the events generated in the installation for instantaneous on the fly check or later report.
- Be upgradable at any later stage.

Interfaces

MS shall be installed on a PC with the following interfaces:

- Ethernet network 100Mb/1000Mb by standard RJ-45 connector.
- Keyboard and mouse
- HDMI or VGA video interface.
- USB port to connect security dongle.
- USB port to connect the proximity desktop reader.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERENCE: 9540

DESIGNATION: MEET MANAGEMENT SOFTWARE USB DONGLE

PC PROXIMITY READER

Description

The PC proximity reader shall provide an easy way to introduce Mifare card codes into the Management Software and assign it to the users.

Configuration

The PC proximity reader shall require no configuration. It shall be plug and play.

Functions

PC proximity reader shall provide the following functions:

Card reading.

- When the administrator is filling the card code for the user, the reader shall provide automatically this data when passing the card in front of the reader.
- The reader shall confirm the card reading with a sound.

Characteristics

Mechanical

PC proximity reader shall:

- Be suitable for desktop use.
- Have reduced dimensions to provide comfort.

Electrical

Power supply shall be provided by USB connection to PC (5VDC).

Interfaces

USB connector to PC for data and power supply.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERENCE: 9538

DESIGNATION: MEET PC PROXIMITY READER

AUXILIARY DEVICES

LIFT CONTROL GATEWAY

Description

The Lift Control Gateway (LCG) shall provide an interface between the Building Intercom System and the Lift Control System, enabling the available floor permissions on the lifts for each user or visitor by means of Relay Decoder, using one relay per floor.

Configuration

The LCG shall be configured in an easy way through an Excel file and one uploading program. Several LCG shall be installed per block or building to manage several lifts.

Functions

LCG shall provide the following functions:

- Owner calls the lift from their URU to go up

- Owner calls the lift from their URU to go down

- Send the lift to the floor where the visitor made the call to the owner.

- Authorize the lift for visitor to access the floor where the owner lives from URU or other additional floors for common areas.

- Authorize the lift for owner to access the floor where the owner lives or a series of authorized floors from Access Control Reader (RFID or face recognition).

- Authorize access to all floors to administrator or service personnel.

- Activate and deactivate the corresponding relays following the configured timing.

- Report to VCU which lift is sent to its floor to inform the visitor the lift he must use.

Characteristics

Mechanical

LCG shall:

- Be DIN rail or wall installed.

- Have reduced dimensions.

Electrical

Power supply shall be provided by 12VDC external power supply.

One display shall show the commands received from the Building Intercom System.

Environmental

LCG shall comply with at least:

- Temperature range: -40 .. +55 ºC.

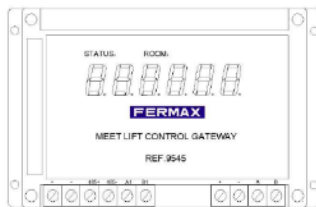- Relative humidity range: 10 – 90% (non-condensing).

Interfaces

RS-485 connector to Main VCU of each block.

RS-485 connector to Relay Decoder.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERENCE: 9545

DESIGNATION: MEET LIFT CONTROL GATEWAY

10 OUTPUTS RELAY DECODER

Description

The 10 Outputs Relay Decoder (RD) shall provide a way to enable individual floors in the Lift Control System. It shall be connected to the Lift Control Gateway, that acts as interface between the Intercom System and the Lift Control System.

It shall also allow activation of devices from the URU.

Configuration

- The RD shall require configuring only the decoder number through a specific program.

Functions

RD shall provide the following functions:

Relay activation.

-    Following the command received from Lift Control Gateway or URU.

Relay deactivation.

- Following the command received from Lift Control Gateway or URU.

Characteristics

Mechanical

RD shall:

- Be DIN rail or wall installed.

- Have reduced dimensions.

Electrical

Power supply shall be provided by 12VDC external power supply.

Environmental

RD shall comply with at least:

- Temperature range: -40 .. +55 ºC.

- Relative humidity range: 10 – 90% (non-condensing).

Interfaces

- RS-485 connector to Lift Control Gateway Bus.

- relays outputs: COM/NO/NC

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERENCE: 1616

DESIGNATION: 10 OUTPUTS RELAY DECODER

PANEL 4 RELAY MODULE

Description

The Panel 4 Relay Module (P4RM) shall provide a way to extend door release to 4 additional relays or locks from URU without requiring additional VCUs. It shall be connected to any digital panel.

Configuration

- The P4RM shall require no configuration itself, it shall be plug and play.
- Main VCU shall be configured with the number of available relays and its timing (activation time and delayed activation time).
- URU shall be configured with the number of maximum available relays for any panel.

Functions

P4RM shall provide the following functions:

Extended door unlocking.

- From URU or APP it shall be possible to select one from 4 additional doors to be unlocked.

Auxiliary devices activations.

- From URU or APP it shall be possible to activate up to 4 devices during conversation with VCU, for instance courtesy light, panic advice, etc.

Characteristics

Mechanical

P4RM shall:

- Be DIN rail or wall installed.
- Have reduced dimensions.

Electrical

Power supply shall be provided by 12VDC external power supply.

Minimum supported contact current shall be 5A @ 24-240V.

Environmental

LCG shall comply with at least:

- Temperature range: -40 .. +55 ºC.
- Relative humidity range: 10 – 95% (non-condensing).

Interfaces

- RS-485 connector to VCU.
- relays outputs: COM/NO/NC
- led for relay activation status.

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERENCE: 1491

DESIGNATION: MEET PANEL 4 RELAY MODULE

EXTERNAL DOOR LOCK RELAY

Description

The External Door Lock Relay (EDLR) shall provide a way to activate the lock from indoor to secure the door opening. It shall be connected to each panel it was required.

Configuration

The EDLR shall require no configuration, it shall be plug and play.

Functions

EDLR shall provide the following function:

Secure door unlocking.

- EDLR shall be installed indoor, out of the range of people outside.
- From URU or SMU it shall be possible to activate the relay in a transparent manner, just pressing the standard key to unlock.
- EDLR shall support egress button input to unlock the door from indoor when exit with self-timed activation.
- EDLR shall support Fire Activation input to unlock the door automatically in case of fire.

Auxiliary devices activation

EDLR shall activate a second relay when sending a DTMF 0 from a SIP device or APP.

Characteristics

Mechanical

- EDLR shall have reduced dimensions.
- EDLR shall be enclosed in a watertight box.

Electrical

Power supply shall be provided by 12VDC external power supply.

Relay contact shall support currents of 10A @24VDC or 240VAC.

Environmental

LCG shall comply with at least:
- Temperature range: -40 .. +70 ºC.
- Relative humidity range: 20 – 80% (non-condensing).

Interfaces

- RS-485 connector to VCU.

- relay output: COM/NO/NC
- led for relay activation status

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERENCE: 1490

DESIGNATION: MEET EXTERNAL DOOR LOCK RELAY

GUEST CODE MODULE

Description

The Guest Code Module (GCM) shall provide a way to integrate VCU to door controllers for validation of temporary pin codes and QR codes assigned to guests. It shall be connected to each panel it was required.

Configuration

The GCM shall require no configuration, it shall be plug and play.

Functions

GCM shall provide the following function:

Interface between VCU and door controller

- Each guest will be provided with a pin code 4 to 5 digits length that must introduce through VCU keypad. Guest can also use a QR code that must show to the VCU camera.
- Additional Facility/Site code can be configured on VCU.
- Pin code shall be sent to controller using 8-bit burst mode or 26-bit Wiegand protocol.
- QR code shall be sent to controller using Wiegand 26- or 34-bits protocol.
- VCU shall optionally work as door controller, validating the codes itself as if they were RFID prox cards.

Characteristics

Mechanical

GCM shall have reduced dimensions and be provided in a resistant enclosure.

Electrical

Power supply shall be provided by 12VDC external power supply.

Environmental

GCM shall comply with at least:

- Temperature range: -40 .. +70 ºC.
- Relative humidity range: 20 – 80% (non-condensing).

Interfaces

- RS-485 connector to VCU.
- Wiegand connector to door controller

[THIS PART IS FOR IDENTIFICATION. TO BE INCLUDED WHEN NECESSARY]

REFERENCE: 1494

DESIGNATION: GUEST CODE MODULE