

ENG



COMPASSO D'ORO



"Qualitec design award"



Top selection innovation "Innovation design award"



**DESIGN Index** 



**100** ITALIAN EXCELLENCE



KNX member no. 423 (M-Ø1A7)





#### Warnings

The information contained in this catalogue may contain technical inaccuracies, omissions or typographical errors. Information is subject to change or update without notice. AVE S.p.A. also reserves the right to make changes and/or improvements, without notice and at any time, to products and/or programmes described in this catalogue.

Ave material must be installed by a qualified person and the installation must be tested by an experienced person, in accordance with the regulations in force.

Technical Catalogue VIDEO ENTRY PHONE BURGLAR ALARM Realisation: AVE spa Communication, Marketing and Advertising Area



**100** ITALIAN EXCELLENCE



## Home Automation, Video intercom, Anti-Intrusion: an amazing integrated system!





www.domoticaplus.it



Ave material must be installed by a qualified person and the installation must be tested by an experienced person; in accordance with the regulations in force

HANNA HA

It is the installer's responsibility to leave his name and address with the customer and preferably also to leave the name and address of the local TAC



1





52



Sistema Videocitofonia

Video Intercom System

\* AVE offers a product range aimed at residential home automation both with AVEbus proprietary protocol, described in this technical catalogue, and with KNX protocol.

For further information please download the KNX brochure at the following link: http://www.ave.it/en/news/d%C3%A9pliant-ave-knx-range







**AVE S.p.A** is a leading Italian company on the international scene of quality electrical and electronic equipment manufacturers. Innovation is our key for tackling change. We create solutions for the electrical and home automation systems sector, solutions which combine design, technology and standards to improve varied lifestyles and guarantee maximum reliability and flexibility.

#### Why choose Ave

#### Made in Italy

AVE focuses on the value and quality of its products keeping its production lines in Italy. Choosing AVE means choosing an Italian product and adding value to your creations thanks to technical and design innovations.

#### R&D

Every year a significant part of the investments made by AVE is allocated to research and development. Each AVE product is the result of the most advanced production technologies and solid know-how in the sector, concrete experience gained alongside architects, technicians, installation technicians and regulators.

#### Design

For AVE design means quality, technological innovation, expertise, professionalism and creative know-how. Countless architects and designers, from Giò Ponti to Andries Van Onck and Makio Hasuike have created products for AVE. AVE has also received numerous prizes and awards including the Compasso d'Oro Award.

#### Quality

We guarantee a constant standard of qualitative excellence, maintained through strict commitment and reflected by the top brands and certifications obtained over time. Before leaving the factory we subject each item to very strict quality controls and perform 100% functional testing on each product.

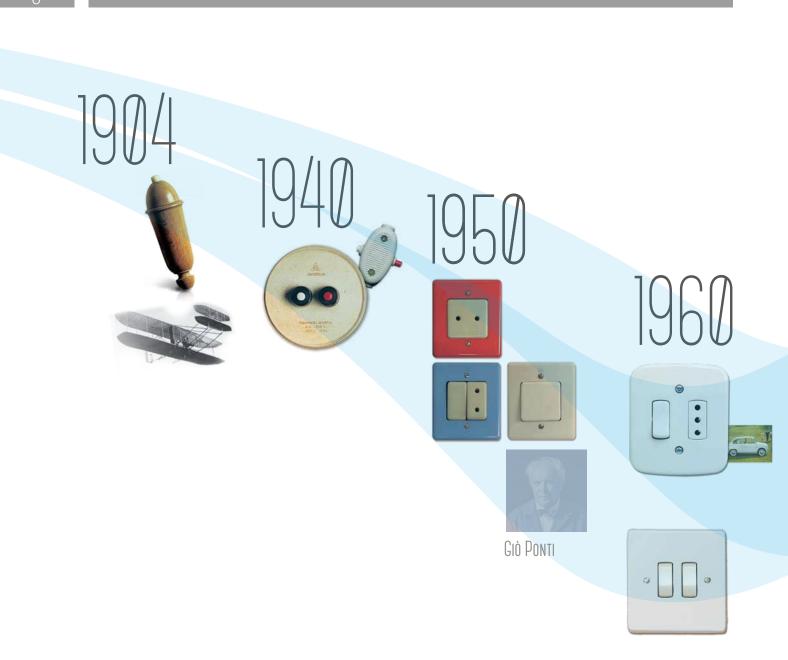
#### **Technical Assistance**

AVE offers professional technical support in Italy and abroad, guaranteed by internal specialists and a Network of Technical Assistance Centres (TAC) that extends to the markets where the Company is present. The TACs provide highly qualified assistance, offering specific expertise on the problems of Home Automation and Security systems.

#### **Training**

Ave offers its customers professional training for hightech ranges, such as home automation, access control for hotels and security in the sense of burglar alarms and fire detection.





#### Innovative from the outset

Founded in 1904, AVE has always been at the forefront in adopting innovative solutions that continuously add to the range of products and systems for electrical and home automation systems. The strong point of all AVE production, a symbolic "made in Italy" brand, is the design that represents the added value on which the company has founded its philosophy.





#### **Product range**

**ave**<sup>®</sup>

















Boxes, Consumer Units and Distribution Boards





AVE offers a product range aimed at residential home automation both with AVEbus proprietary protocol, described in this technical catalogue, and with KNX protocol. The KNX range, illustrated in these pages, is also aesthetically coordinated with the AVE domestic series and boasts a configurable user interface that allows complete signalling of events: load status, alarm presence or simply the repetition of a call.



442KNXT6 Axial control device KNX



442KNXT4 Axial control device KNX

Signalling with three coloured leds

(blue, red and purple) permanently

on or with configurable frequency.



442KNXTC6 Touch control device KNX

ESCO		
ENTRO	<	

442KNXTC4 Touch control device KNX





Variable light intensity in three different modes (Night, Average Daylight and Maximum Daylight)

Sensitive control areas that can be configured in quantity and arrangement to ensure greater flexibility of use



Recognition of the pressure time of the control to make the best use of the control potential



Cyclical sending of values for advanced load control and/or recall of multiple actions



In addition to the aesthetics and functionality of the control devices, the AVE KNX range includes the main system modules.

Also designed to express the best: multifunction, scenarios, alarm management and programmable logic.



**53KNX-80UT** Actuator device **KNX** 



Reduced overall dimensions in order to optimize overall dimensions in the electrical switchboard, thus leaving space for other home automation functions



53KNX-640 Home automation power supply unit **KNX** 

->| Reduced overall dimensions և լո**լոլու** in order to optimize overall dimensions in the electrical switchboard, thus leaving space for other home automation functions



AND/OR logic operations to allow output control also in relation to other communication objects in addition to your own command



Multifunction modules to ensure greater flexibility of use in the various applications.

Eight configurable outputs for lighting, door and window automation and temperature control valves. All in one module



In addition to the controlled system power supply, the module also offers an auxiliary power source for a total of 640 mA, providing greater flexibility of use

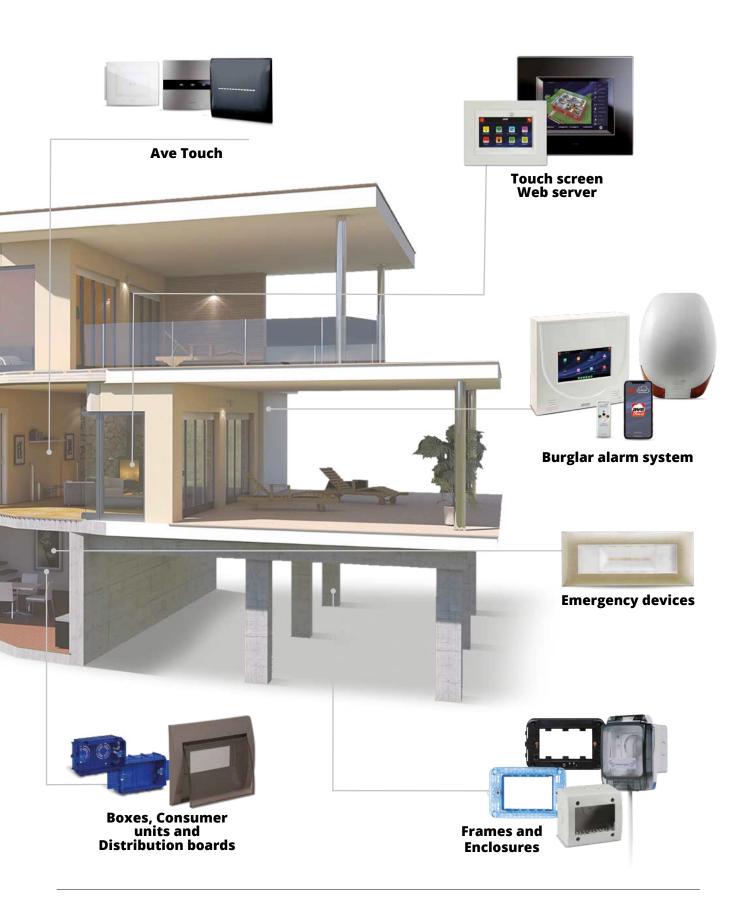


For further information on the KNX product range and to download the ETS application libraries, see the Online Catalogue at https://www.ave.it/en/technical-catalog/hotel-management-homeautomation









**ave**®







ave

**Product range** INTEGRATED SYSTEM (HOME AUTOMATION - ANTI-INTRUSION - VIDEO INTERCOM)

INDOOR AUDIO-VIDEO TOUCH AUDIO-VIDEO OUTDOOR STATION 0 Day Mo 0  $\bigcirc$ HOME ALITOMATION ave a The Integrated Anti-Intrusion System: innovative, flexible and professional Cloud ave









#### System Description

Product range	20
Scope of Application	30
System features	32
Examples of installation	36
Catalogue	
Indoor audio-video station	42
Outdoor "Villa" station	44
Outdoor "Anti-vandal" station	<b>46</b>
Accessories	<b>48</b>
	Scope of Application System features Examples of installation Catalogue Indoor audio-video station Outdoor "Villa" station Outdoor "Anti-vandal" station

System covered by AVE patent no. 234 community model and complying with all applicable Community directives and standards relative to:

• safety: EN 60950-1

- electromagnetic compatibility: EN 301 489-1 and EN 301 489-3
- radio: EN 300 330.

DOMINA SMART VIDEO INTERCOM SYSTEM System Description

**PRODUCT RANGE** 

#### Indoor HANDS-FREE station

The DOMINA video-intercom system stands out thanks to the hands-free indoor station which, in addition to being the indoor terminal for answering calls from outdoor stations, allows home automation supervision.

This is in addition to the countless functions which the system offers, differing from what is normally available on the market, such as text messaging between the apartments and the video-answering machine function, displaying any incoming calls that you have not answered.





### Indoor station integrated in the DOMINA HOME AUTOMATION Touch Screens

The DOMINA video intercom system is also integrated inside the Touch Screen home automation supervisors allowing full management of your home, but also have the possibility to receive calls from external stations and monitor them as if they were normal IP cameras. This is in addition to the advanced home automation functions that DOMINA supervisors already perform, such as scenarios, time programmer, astronomical clock and programmable logic. Besides the fact that DOMINA supervisors are SMART: natively connected to the IoT world of voice assistants.





#### **Ethernet network switches**

DOMINA uses "Voice Over IP" technology which makes it possible to have a conversation using a data connection by means of which all the system devices are connected to each other using the Ethernet network infrastructure suitably configured to allow the transit of UDP Broadcast packets. One of the advantages of this technology is therefore to allow the reuse of any existing data networks or to exploit the same data backbone for multiple functions, thus reducing installation costs.

The DOMINA system therefore has a network switch that allows the plug&play installation of the devices.







#### VILLA model AUDIO-VIDEO station

Outdoor

The DOMINA video intercom system offers two different types of outdoor stations or "push-button panels" so as blend with the different aesthetic requirements of residential and tertiary contexts.

The audio-video outdoor station "VILLA" model stands out for its elegant, modern design and the "touch" technology for making calls. In addition, the white back lighting and the large name tags allow it to be personalized without detracting from its ease of use and elegance.

#### ANTI-VANDAL model AUDIO-VIDEO station

The DOMINA video intercom system offers two different types of outdoor stations or "push-button panels" so as blend with the different aesthetic requirements of residential and tertiary contexts.

The outdoor ANTI-VANDAL audio-video station stands out for its robust and resistant metal structure suitable for all those environments where particular attention must be paid to vandalism.

In addition, its particular resistance to temperature changes and atmospheric agents makes it suitable for most installation contexts.

#### Relay output expansion for ACCESS MANAGEMENT and STAIR LIGHTING

The outdoor stations or "push-button panels" of the DOMINA system manage a relay output integrated in the device itself, in order to control the main access usually containing: typically the pedestrian gate.

However, in order to make the system flexible for varied installation requirements, it also includes a relay expansion module to manage a second gate: typically the driveway gate. In addition, the DOMINA smart video intercom system allows two further expansions common to the entire system (useful for example for switching on the stair lighting). This expansion module also connects to the Ethernet network making it easy to place inside the system and manage from the DOMINA system. DOMINA SMART VIDEO INTERCOM SYSTEM **System Description** 

FEATURES AND ADVANTAGES

EASY TO PROGRAMME

Programming of the DOMINA system does not require specific computer knowledge and is carried out entirely through the web page generated directly by the devices without the need for any additional software. All devices have a network address (IP) and once connected to the network, all devices are fully configurable without needing to be physically in front of them.





#### INTEGRATION ON EXISTING NETWORKS

DOMINA devices can also be connected on existing LAN networks: in this case the **Indoor stations** and the **IP Outdoor Stations** coexist and operate on the same LAN network with other devices. The addressing of the devices must be properly managed by static IP address and the network must be properly configured to pass UDP Broadcast packets.

#### INTEGRATION WITH IP-Cam AND ACCESS CONTROL

The potential of the DOMINA system makes it possible to use the IP network itself to integrate security and video control functions, such as camera display and access control, in the video intercom system.







#### ADVANTAGES FOR THE USER

#### QUALITY

Cutting-edge technology capable of ensuring the best audio and audio/video communication.

#### FREEDOM

Calls also received on DOMINA Home automation supervisors. CONVENIENCE

With the integrated video intercom answering machine it is possible to store messages.

#### UTILITY

DOMINA offers the possibility to send text information messages directly to the indoor stations of the apartments.

#### SECURITY

DOMINA offers the visualization of environments by means of cameras located in separate indoor stations.

#### ADVANTAGES FOR THE BUILDER

#### INNOVATIVE

DOMINA is a system with excellent and innovative video intercom

#### functions. SCALABLE

Easy expansion of the system according to specific requirements.

#### UPGRADABLE

The system can be upgraded without structural intervention: this ensures updating of the functions and maintenance of the value of the system.

#### INTEGRABLE

Pre-existing infrastructure can easily be used.

#### COMPETITIVE

DOMINA allows lower wiring, commissioning and maintenance costs.

#### ADVANTAGES FOR THE INSTALLER

#### SIMPLICITY

In the design and budgeting of the system.

#### PRACTICAL

Thanks to the small number of elements, easy installation and connection.

#### FLEXIBILITY

Easily reconfigurable system structure.

#### PROGRAMMING

Can be performed entirely without any configuration software, without direct intervention on the devices.

#### COMPETITIVENESS

With the use of standard Ethernet cables, easily available.

#### VERSATILITY

Includes CCTV (IP-Cam) access control and viewing functions.

#### DOMINA SMART VIDEO INTERCOM SYSTEM System Description

INDOOR AUDIO-VIDEO TOUCH SCREEN HANDS-FREE STATION

24



- Elegant design for classy environments
- Dual material structure: Aluminium and Glass
- Two colours available:

Code TS10N-V Natural brushed aluminium and black central frame.

Code TS10B-V White anodized aluminium and white central frame (Black Display Area)

#### TS10N-V

Indoor Touch Screen Hands-Free station





REGISTRAZIONI

#### VIDEO ANSWERING MACHINE

When receiving the call, the indoor station displays the video stream of the outdoor station and stores, after the configurable response time, a short video-message to show the caller.

The list of video calls present in the answering machine can be consulted locally on the device and remotely via the Cloud.



#### IP CAMERA MONITORING

At any time you can observe from the indoor workstation what is happening in front of the outdoor station and activate the Audio Video conversation. It is also possible to manage the Open Door outputs of both controlled gates and display the video stream of the 6 outdoor stations in addition to 10 additional H264 IP Cameras.



Answer remotely to anyone

calling you at home ...

observe, control and manage!

#### TEXT MESSAGING BETWEEN THE APARTMENTS

Between the TS10..-V indoor stations text messages can be sent and received so as to communicate quickly between condominiums and create personal reminders.







53AB-WBS Home Automation WEB SERVER



**INTERCOM CALLS** 

Between the TS10..-V indoor stations, intercom calls can be easily made via the contact list.

Audio calls can be made both between the 4 indoor stations of the same apartment and between the indoor stations of the other apartments.



#### CHOICE OF RINGTONES TO USE

The TS10..-V indoor stations allow the user to load custom ringtones.



Installing AVE Domina means being able to count on a system that provides the automation, comfort and

communication functions required today for a modern home. It also means having an expandable, modular system which, once installed with the basic functions, can be expanded to meet the needs of the most demanding customers. The functions are integrated in the DOMINA system, which connects each component of its sub-system to the AVE SMART macro system via Ethernet connection. Using DOMINA also means simplifying installation,

**TS10N-V** Indoor Touch Screen Hands-Free station

improving maintenance and making it easy to expand existing installations.



#### OPEN AUTOMATIC DOOR ON CALL

In TS10..-V indoor stations it is possible to enable the automatic door opening function which sends the door opening command when a call addressed to a specific user is received.

This function is particularly useful for commercial activities that are typically located in residential contexts.



AVE DOMINA TECHNOLOGICAL SUPERVISION SYSTEMS In the TS10..-V indoor stations, the "Home Automation" supervision function is also integrated. By combining with the Home Automation Supervisor or the DOMINA Anti-Intrusion Control Unit, the HOME AUTOMATION, ANTI-INTRUSION and VIDEO INTERCOM System is obtained.



#### SCREENSAVER WITH DIGITAL FRAME

The TS10..-V indoor workstations allow the user to upload their own images and photographs so as to use the device not only as a terminal of the video intercom system and home automation supervisor but also as a furnishing or rather as a digital frame.



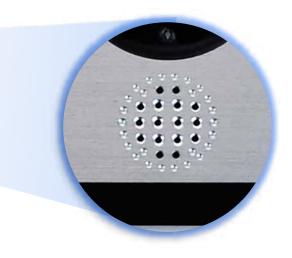
# DOMINA SMART VIDEO INTERCOM SYSTEM System Description

OUTDOOR "VILLA" MODEL AUDIO-VIDEO STATION



VI-AV002-TC Two-call audio video outdoor station

- Elegant design for classy environments
- Dual material structure: Aluminium and tempered Glass
- SENSITIVE TOUCH call front plate
- IP54 protection rating
- Flush and/or Wall Installation



- Audio with noise cancellation system (≥25dB)
- Volume adjustment via web configuration
- 8Ω 0,5W speaker



VI-FP001-TC One-call front plate



VI-FP004-TC Four-call front plate



## ave<sup>®</sup>

#### Outdoor VILLA model AUDIO-VIDEO station

The DOMINA video intercom system offers two different types of outdoor stations or "push-button panels" so as blend with the different aesthetic requirements of residential and tertiary contexts.

The audio-video outdoor station "VILLA" model stands out for its elegant, modern design and the "touch" technology for making calls. In addition, the white back lighting and the large name tags allow it to be personalized without detracting from its ease of use and elegance.



# REGISTRAZIONI

#### VIDEO ANSWERING

MACHINE

When the Call arrives, the indoor station displays the video stream of the outdoor station and stores a short video-message to show who called.

Once the configurable response time has elapsed, the Video Answering Machine function is activated, allowing the caller to leave a specific recorded message.

The list of video calls present in the answering machine can be consulted locally on the device and remotely via the Cloud.

#### MIFARE® TRANSPONDER ACCESS CONTROL

The outdoor stations of the DOMINA video intercom system use MIFARE® contactless technology, guaranteeing reliability also in the auxiliary function of access control.

The system uses the unique code of the Cards without any need to write data inside them. This means that the same card can also be used with third party systems (not provided by AVE) offering customers a very wide range of services, accessed by the same card.

The DOMINA system can manage two types of Card: Master and USER. The first, the Master card, used to match the 50 User cards to the outdoor station. The second, the User card, to use

the access control function with the possibility of limiting its operation to a different time slot for each day of the week. An event log stores the access history so as to monitor any card passages and block unwanted ones.

1
2

Active	from hours	to hours
Sunday	00:00	24:00
Monday	00:00	24:00
Tuesday	00:00	24:00
Wednesday	00:00	24:00
Thursday	00:00	24:00
Friday	00:00	24:00
Saturday	00:00	24:00

NOTE: Powering of the system is recommended via a UPS line.



#### OPEN AUTOMATIC DOOR ON CALL

In outdoor stations. the automatic door opening function caters to the needs of all those commercial activities that are typically located in residential contexts. All this without reducing security, in fact each access can be controlled by a magnetic sensor that, if connected to the device, allows supervision of the access status, signalling a possible break-in or door left open status.



#### **IP CAMERA MONITORING**

At any time you can observe what is happening in front of the outdoor station and activate the Audio Video conversation. In this way it is also possible to manage the Open Door outputs of both controlled accesses and display the video flow of the 6 outdoor stations.

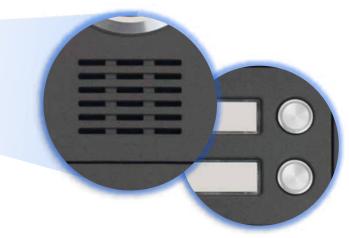


# DOMINA SMART VIDEO INTERCOM SYSTEM System Description

#### OUTDOOR "ANTI-VANDAL" AUDIO-VIDEO STATION MODEL



- Visibility guaranteed thanks to low consumption white LED back lighting
- Tags removable after removing the vandalism protection
- Metal push-button panel to ensure robustness
- IP54 protection rating
- Flush and/or Wall Installation



- Audio with noise cancellation system (≥25dB)
- Volume adjustment via web configuration
- 8Ω 0,5W speaker

VI-AV002-VP Two-call audio video outdoor station



VI-FP001-VP One-call front plate



VI-FP004-VP Four-call front plate



## **ave**

#### Outdoor ANTI-VANDAL model AUDIO-VIDEO station

The DOMINA video intercom system offers two different types of outdoor stations or "push-button panels" so as blend with the different aesthetic requirements of residential and tertiary contexts.

The outdoor "ANTI-VANDAL" audio-video station stands out for its robust and resistant metal structure suitable for all those environments where particular attention must be paid to vandalism. In addition, its particular resistance to temperature changes and atmospheric agents makes it suitable for most installation contexts.



# REGISTRAZIONI

#### VIDEO ANSWERING

MACHINE

When the Call arrives, the indoor station displays the video stream of the outdoor station and stores a short video-message to show who called.

Once the configurable response time has elapsed, the Video Answering Machine function is activated, allowing the caller to leave a specific recorded message.

The list of video calls present in the answering machine can be consulted locally on the device and remotely via the Cloud.

#### MIFARE® TRANSPONDER ACCESS CONTROL

The outdoor stations of the DOMINA video intercom system use MIFARE® contactless technology, guaranteeing reliability also in the auxiliary function of access control.

The system uses the unique code of the Cards without any need to write data inside them. This means that the same card can also be used with third party systems (not provided by AVE) offering customers a very wide range of services, accessed by the same card.

The DOMINA system can manage two types of Card: Master and USER. The first, the Master card, used to match the 50 User cards to the outdoor station. The second, the User card, to use

the access control function with the possibility of limiting its operation to a different time slot for each day of the week. An event log stores the access history so as to monitor any card passages and block unwanted ones.

Ś.
1
2

Active	from hours	to hours
Sunday	00:00	24:00
Monday	00:00	24:00
Tuesday	00:00	24:00
Wednesday	00:00	24:00
Thursday	00:00	24:00
Friday	00:00	24:00
Saturday	00:00	24:00

**NOTE:** Powering of the system is recommended via a UPS line.



#### OPEN AUTOMATIC DOOR ON CALL

In outdoor stations. the automatic door opening function caters to the needs of all those commercial activities that are typically located in residential contexts. All this without reducing security, in fact each access can be controlled by a magnetic sensor that, if connected to the device, allows supervision of the access status, signalling a possible break-in or door left open status.



#### **IP CAMERA MONITORING**

At any time you can observe what is happening in front of the outdoor station and activate the Audio Video conversation. In this way it is also possible to manage the Open Door outputs of both controlled accesses and display the video flow of the 6 outdoor stations. **IDEO ENTRY PHONE** 



## DOMINA SMART VIDEO INTERCOM SYSTEM System Description

#### SCOPE OF APPLICATION



#### TS05N-V

15" colour TOUCH SCREEN with glass front plate



**TS04X-V** 12.1" colour TOUCH SCREEN with graphic maps



**TS03..-V** 5.7" colour TOUCH SCREEN with graphic maps



**TS10N-V** Indoor Touch Screen Hands-Free station



**TS01** 4.3" colour TOUCH SCREEN with LCD graphic



53AB-WBS Home Automation WEB SERVER









**VI-AV002-VP** Two-call audio video outdoor station



**TS10N-V** Indoor Touch Screen Hands-Free station



**VI-AV002-VP** Two-call audio video outdoor station



**TS10N-V** Indoor Touch Screen Hands-Free station





**VI-AV002-VP** Two-call audio video outdoor station



**TS03B-V** Touch Screen Hands-Free home automation supervisor

# DOMINA SMART VIDEO INTERCOM SYSTEM System Description

POSSIBILITIES

The outdoor station manages 2 accesses, of which one by means of expansion with "open door" feedback

The housing unit can have up to five outdoor stations, each of which with its own additional access management expansion





 $\equiv \equiv$ The outdoor station is able to 0 e communicate with 2 1 11 1 4 housing units Ŵ AVD 10 12 把办 23:59  $\bigcirc$ The single 23:59 8 ST 1 call of the Ð outdoor AVB station is able 23:59 NO 100 57 1 to communicate with 4 indoor stations 23:59 of the same housing unit

DOMINA SMART VIDEO INTERCOM SYSTEM **System Description** 

**POSSIBILITIES** 

34



In the same housing complex, the internal stations of the various apartments are intercommunicating with each other, also via text messages

23:59 23:59 23:59 23:59 23:59 23:59 







23:59

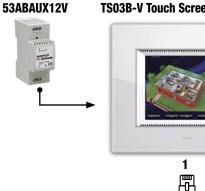
The indoor stations can monitor up to 10 cameras of a possible CCTV system via IP

The indoor stations can communicate with the web server module of the home automation system and/or the Anti-Intrusion system

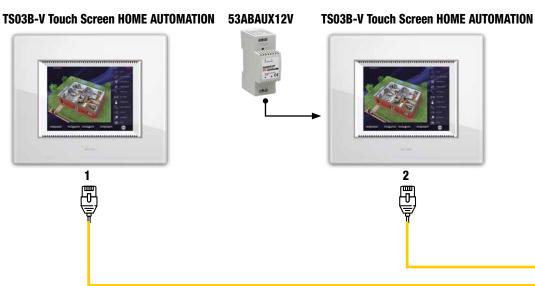


# DOMINA SMART VIDEO INTERCOM SYSTEM **System Description**

**EXAMPLES OF INSTALLATION- HOME AUTOMATION VILLA WITH TOUCH SCREEN** 







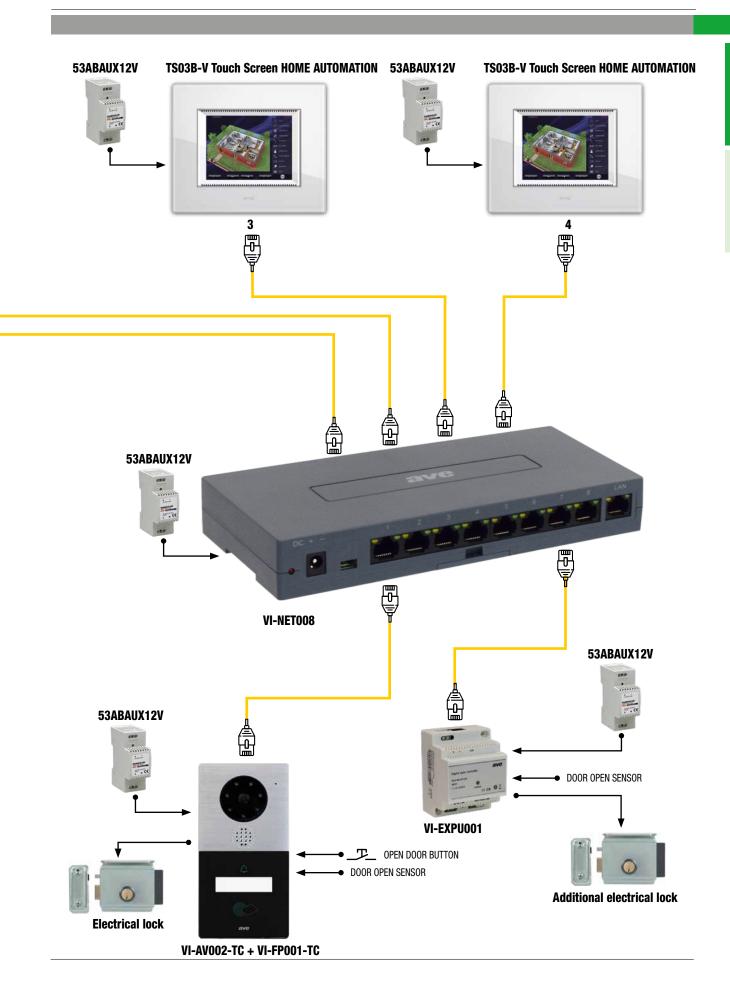


### Technical notes

- 4 indoor stations for each call
- All devices must be powered at 12Vdc
- All devices must be connected to the network (max 100m)
- All devices receive the call simultaneously



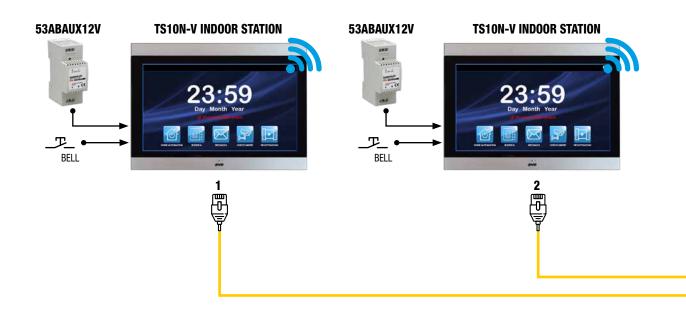




VIDEO ENTRY PHONE

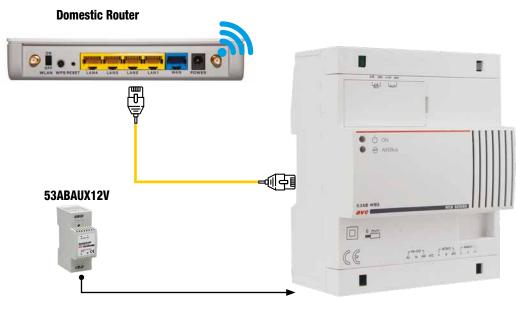
DOMINA SMART VIDEO INTERCOM SYSTEM System Description

EXAMPLES OF INSTALLATION- APARTMENT WITH HOME AUTOMATION WEBSERVER



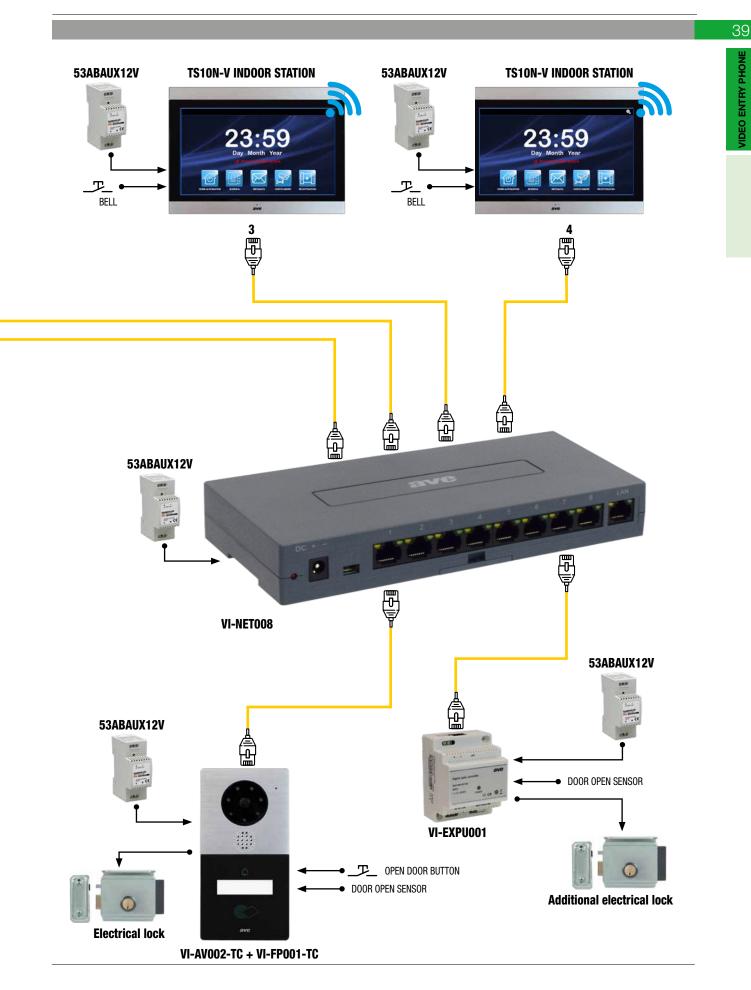
Technical notes

- 4 indoor stations for each call
- All devices must be powered at 12Vdc
- All devices must be connected to the network (max 100m)
- All devices receive the call simultaneously
- All devices supervise DOMINA via Wi-Fi



53AB-WBS Home Automation Web Server

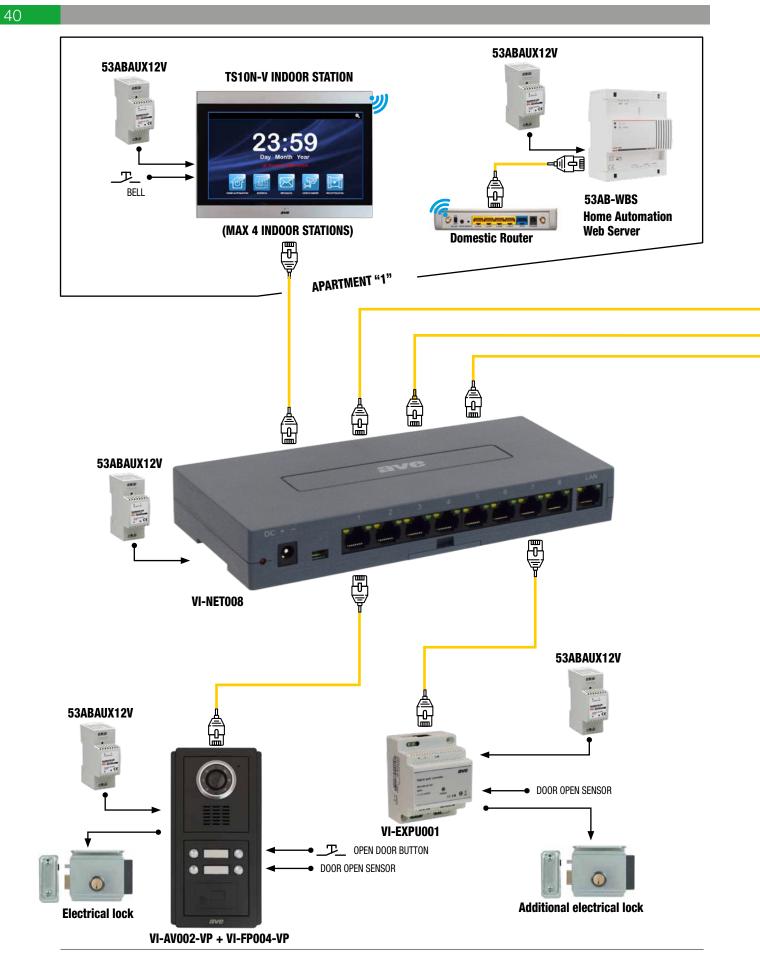




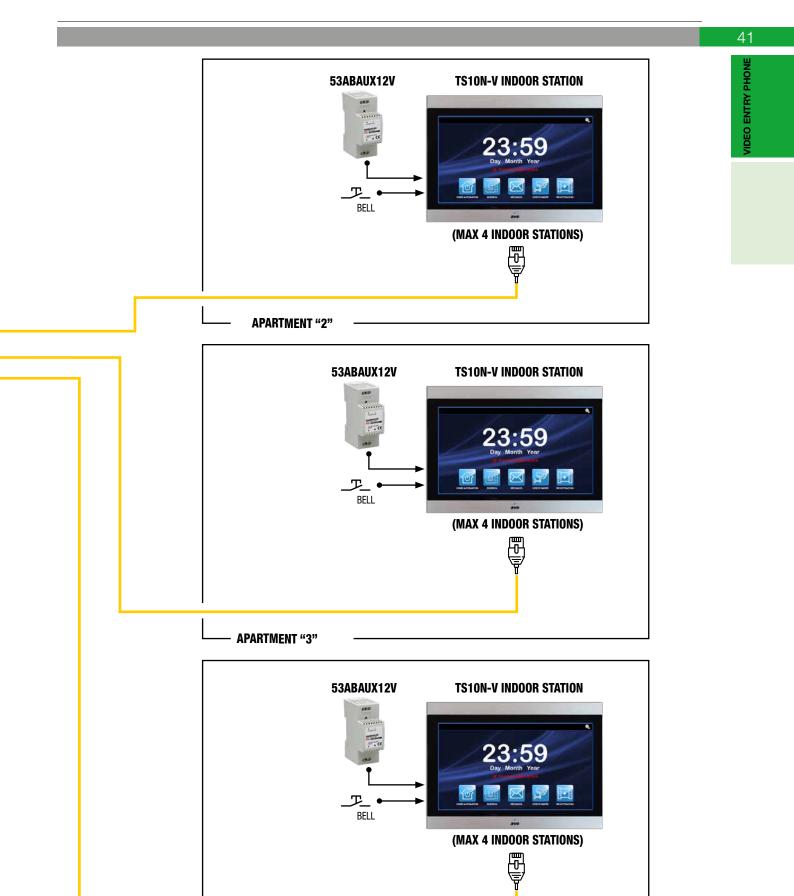
4 AVA

# DOMINA SMART VIDEO INTERCOM SYSTEM System Description

**EXAMPLES OF INSTALLATION - FOUR-CALL HOUSING UNIT** 







**APARTMENT "4"** 

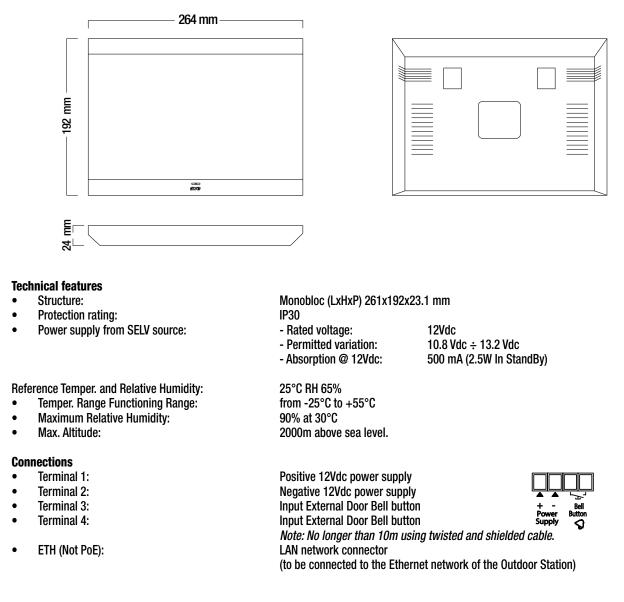
## TECHNICAL CATALOGUE Domina smart video intercom system

INDOOR AUDIO-VIDEO TOUCH SCREEN HANDS-FREE STATION Code. TS10..-V

The TS10..-V device is an indoor audio-video station of the DOMINA Video intercom system with Touch Screen function designed to manage both the video intercom system in combination with the outdoor station and the home automation system in combination with one of the home automation supervisors that perform the web-server function. The stylized graphical user interface with graphic icons and interactive menus, allows a simple and intuitive management of the entire system.

In addition to the home automation supervisor functions (in combination with the web-server), it also integrates the video camera monitoring function\*, text messaging between apartments, intercom calls, video answering machine, screensaver with digital frame, enabling of the door opening function and in general the control of the video intercom system.

The device is made in a monobloc for wall installation by means of the dedicated fixing bracket supplied, compatible with standard wall boxes. As far as the electrical wiring is concerned, the device needs the power supply from the 53ABAUX12V Ethernet connection to the outdoor station (and/or the VI-NET008 network switch) and, for the home automation function, the Wi-Fi signal cover from the router which the Web-Server is connected to. In addition, for the Outside Door Bell function, it is required to connect to the potential-free contact of a normal open push button placed outside the apartment using a 2x0.50 mm2 cable, (it is recommended to use conductors separate from the power and portions not exceeding 20m).

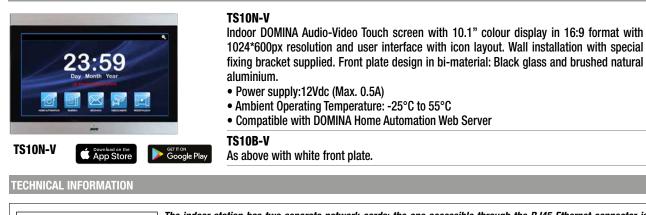


#### Warnings (\*)

Consult the "Installation Requirements" at www.ave.it in the TECHNICAL MANUALS section. It is also recommended to set up an internet connection to allow remote assistance during the warranty period of the product. We recommend a dedicated power supply line (UPS) We also recommend periodic verification of software updates in order to have the best performance and ensure correct operation. Updates are available through the technical support network.







The indoor station has two separate network cards: the one accessible through the RJ45 Ethernet connector is used for communication with the wired backbone of the video intercom; while the second Wi-Fi type network card is used for data connection inside the apartment via the relative home router (to which the home automation webserver, the burglar alarm and the internet connection for access the AveIntercom cloud is connected).

In addition, the "Bell Button" input allows the connection of an external button to use the "Outside Door Bell" function.

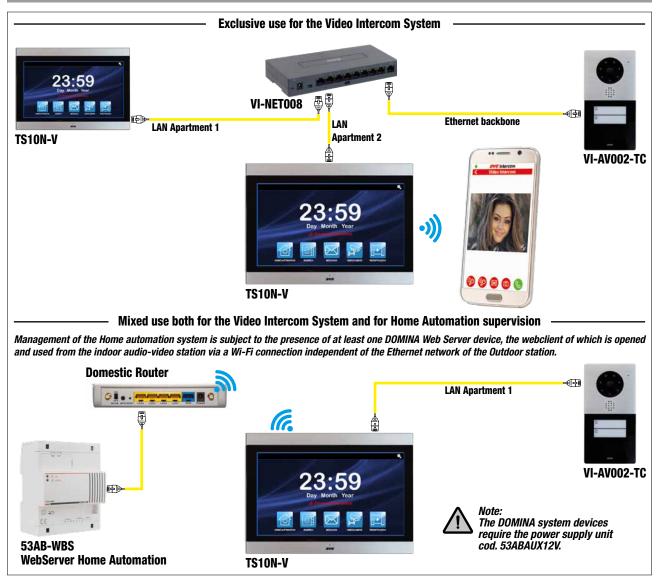
# Bell Button

#### **EXAMPLE OF USE**

RJ45

Ethernet

Power: 12-18Vdc 300mA





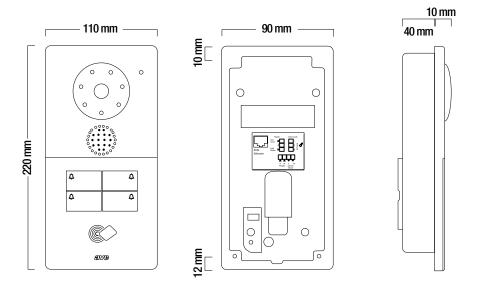
# TECHNICAL CATALOGUE Domina smart video intercom system

OUTDOOR "VILLA" MODEL AUDIO-VIDEO STATION - Code VI-AV002-TC

The device VI-AV002-TC is the outdoor audio/video station "Villa" model of the DOMINA Video intercom system, it can be installed on an outdoor wall or flush mounted using dedicated boxes and rain cover. It is marketed with a double call button front plate (two-call), and configured for substitution of the front plate with the one-call version or the four-call version. The audio-video outdoor station "VILLA" model stands out for its elegant, modern design and the "touch" technology for making calls. In addition, the white back lighting and the large name tags allow it to be personalized without detracting from its ease of use and elegance.

The outdoor stations of the video intercom system use MIFARE® contactless technology, guaranteeing reliability also in the additional function of access control. The system uses the unique code of the Cards without any need to write data inside them. This means that the same card can also be used with third party systems (not provided by AVE) offering customers a very wide range of services, accessed by the same card. The system can manage two types of Card: Master and USER. The first, the Master card, used to match the 50 User cards to the outdoor station. The second, the User card, to use the access control function with the possibility of limiting its operation to a different time slot for each day of the week. An event log stores the access history so as to monitor any card passages and block unwanted ones.

The device is made in a monobloc for wall installation by means of the dedicated fixing bracket with rain cover VI-BOX102RP-TC, or for flush installation with the dedicated box VI-BOX002-TC and optionally the cover VI-RP002-TC.



As far as the electrical wiring is concerned, the device requires the 53ABAUX12V power supply or, alternatively, the PoE type Ethernet connection using the appropriate PoE Injector. While for management of the pedestrian passage it has, directly on board the device, the Open Door button input and the relay output (C-NC-NA) with potential-free contact. In addition, the output (12Vdc 500mA) is available for the power supply of the electric lock, which can be used especially if the device is powered by PoE. As far as the "Open Door" feedback function is concerned, it is necessary to connect to the potential-free contact of a normal magnetic sensor placed on the access, using a 2x0.50 mm2 cable (it is recommended to use conductors separate from the power and portions not exceeding 100m; to be considered signal ports according to EN 61000-6-1).

IP54

- Rated voltage:

25°C RH 65%

90% at 30°C

- Permitted variation:

- Absorption @ 12Vdc:

from -40°C to +70°C

2000m above sea level.

Monobloc (WxHxD) 110x220x56.5 mm

#### **Technical features**

- Structure:
- Protection rating:
- Video camera:
- Power supply from SELV source:
- Reference Temper. and Relative Humidity:
- Temper. Range Functioning Range:
- Maximum Relative Humidity:
- Max. Altitude:

#### Connections

- Terminal 1, 2 and 3:
- Terminal 4, 5 and 6:
- Terminal P+ and P-:
- Terminal 12V e G:
- ETH:

Door Sensor, Door Open sensor input GND Lock Button, Button input Open Door Door Lock, relay contact (NO Normally Open) Door Lock, relay contact (NC Normally Closed) Shared COM Power + / -, Positive and Negative power supply 12Vdc (alternatively to PoE) 12V Out, Line 12Vdc 500mA for the power supply of the electric lock

IP Camera 2Mpx with 80° horizontal and 55° vertical viewing angle

12Vdc / PoE

10.8 Vdc ÷ 13.2 Vdc

500 mA (2.5W In StandBy, 4W at full load)

LAN network connector (to be connected to the Ethernet network of the Outdoor Station)







VI-AV002-TC

#### VI-AV002-TC

Audio-video outdoor station two-call "VILLA" model with "Soft Touch" buttons. Front plate design in bi-material: Black glass and brushed natural aluminium.Can be installed on an outdoor wall or flush mounted using dedicated boxes and rain cover. It is marketed with a double call button front plate, and configured for substitution of the front plate with the one-call version or the four-call version.

• Compatible with DOMINA home automation supervisors code TS03x-V or higher.

#### VI-FP001-TC

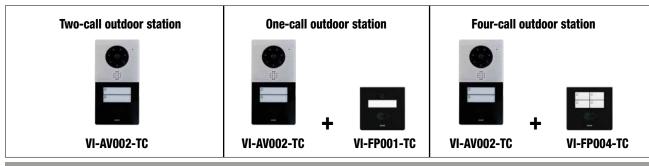
Front panel with no.1 "Soft Touch" button for outdoor station "Villa" model

#### VI-FP004-TC

Front panel with no.4 "Soft Touch" buttons for outdoor station "Villa" model

For boxes and installation accessories see the following pages

#### **VERSIONS AVAILABLE**



**TECHNICAL INFORMATION** 

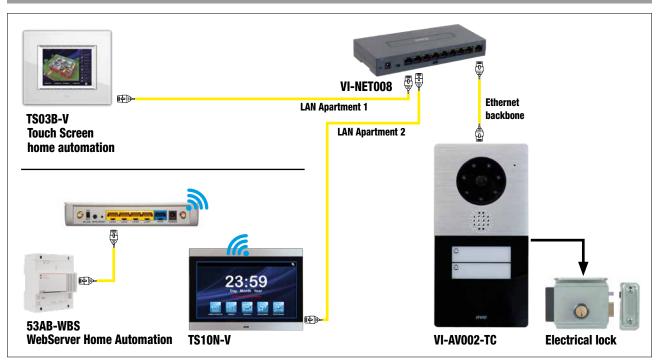


#### MIFARE® TRANSPONDER ACCESS CONTROL

The outdoor stations of the DOMINA video intercom system use MIFARE® contactless technology, guaranteeing reliability also in the auxiliary function of access control. The system uses the unique code of the Cards without any need to write data inside them. This means that the same card can also be used with third party systems (not provided by AVE) offering customers a very wide range of services, accessed by the same card.

WARNING: if the time slot access control function is enabled, the indoor station must be powered by a UPS line to guarantee the time slots.

**EXAMPLE OF USE** 



45

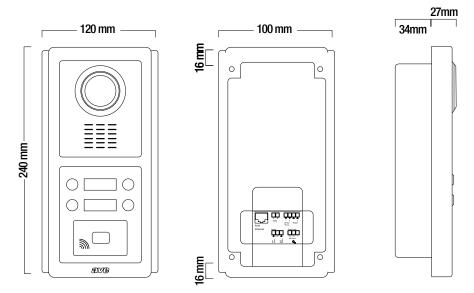
## TECHNICAL CATALOGUE Domina smart video intercom system

OUTDOOR "ANTI-VANDAL" MODEL AUDIO-VIDEO STATION" - Code VI-AV002-VP

The VI-AV002-VP device is the outdoor audio/video station "Anti-vandal" model for installation on an outdoor wall or flush mounted using dedicated boxes and rain cover. It is marketed with a double call button front plate (two-call), and configured for substitution of the front plate with the one-call version or the four-call version. The outdoor ANTI-VANDAL audio-video station stands out for its robust and resistant metal structure suitable for all those environments where particular attention must be paid to vandalism. In addition, its particular resistance to temperature changes and atmospheric agents makes it suitable for most installation contexts.

The outdoor stations of the video intercom system use MIFARE® contactless technology, guaranteeing reliability also in the additional function of access control. The system uses the unique code of the Cards without any need to write data inside them. This means that the same card can also be used with third party systems (not provided by AVE) offering customers a very wide range of services, accessed by the same card. The system can manage two types of Card: Master and USER. The first, the Master card, used to match the 50 User cards to the outdoor station. The second, the User card, to use the access control function with the possibility of limiting its operation to a different time slot for each day of the week. An event log stores the access history so as to monitor any card passages and block unwanted ones.

The device is made in a monobloc for wall installation by means of the dedicated fixing bracket with rain cover VI-BOX102RP-VP, or for flush installation with the dedicated box VI-BOX002-VP and optionally the cover VI-RP002-VP.



As far as the electrical wiring is concerned, the device requires the 53ABAUX12V power supply or, alternatively, the PoE type Ethernet connection using the appropriate PoE Injector. While for management of the pedestrian passage it has, directly on board the device, the Open Door button input and the relay output (C-NC-NA) with potential-free contact. In addition, the output (12Vdc 500mA) is available for the power supply of the electric lock, which can be used especially if the device is powered by PoE. As far as the "Open Door" recognition function is concerned, it is necessary to connect to the potential-free contact of a normal magnetic sensor placed on the access, using a 2x0.50 mm2 cable (it is recommended to use conductors separate from the power and portions not exceeding 100m; to be considered signal ports according to EN 61000-6-1).

#### **Technical features**

- Container:
- Protection rating:
- Video camera:
- Power supply from SELV source:
- Reference Temper. and Relative Humidity:
- Temper. Range Functioning Range:
- Maximum Relative Humidity:
- Max. Altitude:

#### Connections

- Terminal 1, 2 and 3:
- Terminal 4, 5 and 6:
- Terminal 7 and 8:
- Terminal 9 and 10:
- ETH:

Monobloc (LxHxP) 120x240x60.5 mm

IP54

IP Camera 2Mpx with 80° horizontal and 55° vertical viewing angle

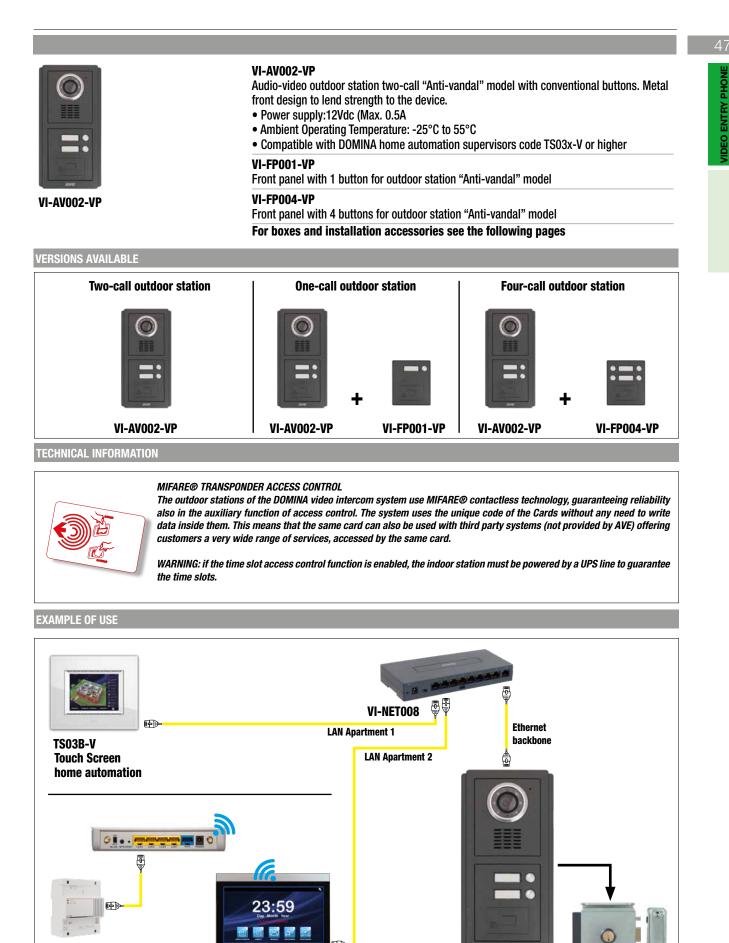
- Rated voltage: - Permitted variation:
- Absorption @ 12Vdc: 25°C RH 65% from -40°C to +70°C 90% at 30°C
- 12Vdc / PoE 10.8 Vdc ÷ 13.2 Vdc 500 mA (2.5W In StandBy, 4W at full load)
- 2000m above sea level.

Door Sensor, Door Open sensor input GND Lock Button, Input Open Door button

Door Lock, relay contact (NO Normally Open, NC Normally Closed and Shared COM) Power + / -, Positive and Negative power supply 12Vdc (alternatively to PoE) 12V Out, Line 12Vdc 500mA for the power supply of the electric lock LAN network connector (to be connected to the Ethernet network of the Outdoor Station)







VI-AV002-VP

**Electrical lock** 

53AB-WBS

WebServer Home Automation

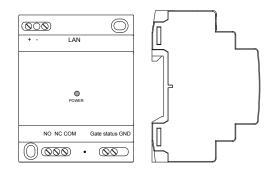
TS10N-V

# TECHNICAL CATALOGUE Domina smart video intercom system

**EXPANSION OUTPUT FOR ADDITIONAL ACCESS CONTROL - Cod. VI-EXPU001** 

The VI-EXPU001 device is an expansion of the Outdoor Station of the DOMINA system used for the control of an additional entrance access. The device has a relay output with potential-free contact (COM - NC - NO) and an input for detection of the access status (door open / closed). A SELV type isolated dry contact sensor can be connected to the input in order to signal unwanted opening of the controlled access. The time of entrance and function enabling is configurable. The device must be paired with an Outdoor Station and the settings follow the programming of the Station to which it is paired. The configuration of the devices does not require additional software as all devices have a mini web server on board which generates the configuration environment accessible from a standard internet browser.

As far as the electrical wiring is concerned, the device requires the 53ABAUX12V power supply of the non-PoE Ethernet connection towards the outdoor station and for the "Open Door" feedback function, connection to the potential-free contact of a normal magnetic sensor placed on the access, using a 2x0.50 mm<sup>2</sup> cable is required (it is recommended to use conductors separate from the power and portions not exceeding 10m; to be considered signal ports according to EN 61000-6-1).



- Rated voltage: 12-24Vdc - Permitted variation: 1

- Absorption @ 12Vdc:

from -40°C to +50°C

2000m above sea level.

Positive 12Vdc power supply

Negative 12Vdc power supply

Input Door Open sensor

LAN network connector

25°C RH 65%

90% at 30°C

1A @ 230Vac

IP30

4 DIN modules (LxHxP) 68.5x89x60 mm

10.8 Vdc ÷ 13.2 Vdc - 21.6 Vdc ÷ 26.4 Vdc

80 mA (1W In StandBy)

Relay contact (NO Normally Open, NC Normally Closed and Shared COM)

Note: No longer than 10m using twisted and shielded cable.

(to be connected to the Ethernet network of the Outdoor Station)

#### **Technical features**

- Structure:
- Protection rating:
- Power supply from SELV source:
- Reference Temper. and Relative Humidity:
- Temper. Range Functioning Range:
- Maximum Relative Humidity:
- Max. Altitude:

#### **Characteristics of controllable electric load**

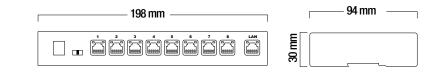
Ohmic load (cosφ 1):

#### Connections

- Terminal 1:
- Terminal 2:
- Terminal 3, 4 and 5:
- Terminal 6 and 7:
- ETH:
- \_\_\_\_\_

### VI-NETOO8 -

The VI-NET008 device is an Ethernet network switch with eight 10/100 ports and 1 port for the video intercom backbone. The installation of the device is simple and requires no software or configuration. Assembly is of the desktop or DIN guide type.



#### **Technical features**

- Structure:
- Protection rating:
- Power supply from SELV source:

12 DIN modules (LxHxP) 200x95x30 mm

- IP30
- Rated voltage: 12-24Vdc
- Permitted variation: 10.8 Vdc ÷ 13.2 Vdc 21.6 Vdc ÷ 26.4 Vdc
- Absorption @ 12Vdc: 120 mA







VI-EXPU001



VI-NET008

#### VI-EXPU001

Expansion device for managing access opening and control to be combined with the Outdoor Stations of the DOMINA video intercom system. Expands to 2 Controlled accesses for each outdoor station. Installation from DIN 4 module guide.

- Power supply:12Vdc (Max. 0.5A)
- Ambient Operating Temperature: -40°C to 50°C

#### VI-NET008

Ethernet network switch with eight 10/100 ports and 1 port for the video intercom backbone. Ideal for Small Business Network, simple installation no software or configuration required, support for desktop assembly or DIN 12 Module guide.

- Fan-free design, zero noise, ideal for offices or workspaces
- Power supply:12Vdc (Max. 0.5A)
- Ambient Operating Temperature: -25°C to 55°C

#### **TECHNICAL INFORMATION**



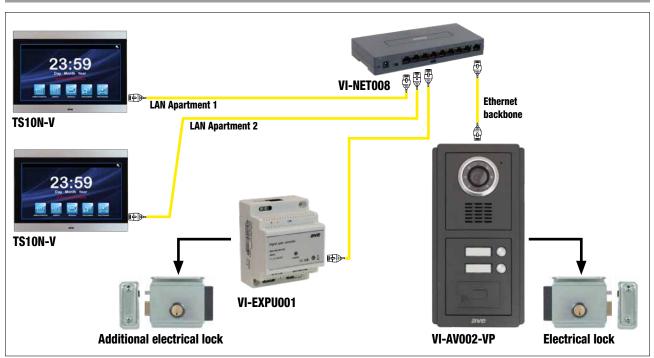
#### MIFARE® TRANSPONDER ACCESS CONTROL

The outdoor stations of the DOMINA video intercom system use MIFARE® contactless technology, guaranteeing reliability also in the auxiliary function of access control. The system uses the unique code of the Cards without any need to write data inside them. This means that the same card can also be used with third party systems (not provided by AVE) offering customers a very wide range of services, accessed by the same card.



The access managed by the Transponder Access Control is only the one directly connected to the Outdoor Station.

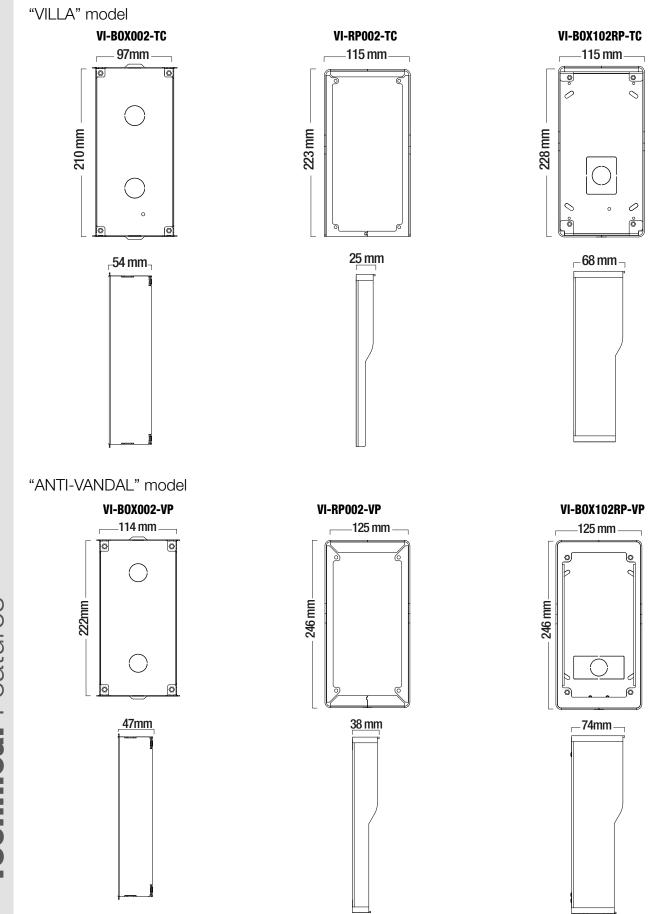
#### **EXAMPLE OF USE**





# TECHNICAL CATALOGUE Domina smart video intercom system

INSTALLATION BOXES AND ACCESSORIES



**Technical** Features



# ave<sup>®</sup>

#### "VILLA" MODEL





#### VI-BOX002-TC

Recessed box for masonry walls to be used for outdoor station mod. "VILLA" • Dimensions (WxHxD): 97x210x54 mm

#### VI-RP002-TC

Accessory rain cover for outdoor station mod. "VILLA" for use with flush mounting box • Dimensions (WxHxD): 115x223x25 mm

#### VI-BOX102RP-TC

Box for wall mounted installation complete with rain cover for outdoor station mod. "VILLA" • Dimensions (WxHxD): 115x228x68 mm

VI-BOX002-TC





# VI-RP002-TC

#### "ANTI-VANDAL" MODEL



#### VI-BOX002-VP



VI-BOX102RP-VP

#### VI-BOX002-VP

- Recessed box for masonry walls to be used for outdoor station mod. "ANTI-VANDAL"
- Dimensions (WxHxD): 114x222x47 mm



 $\label{eq:accessory} \mbox{ accessory rain cover for outdoor station mod. ``ANTI-VANDAL'' for use with flush mounting box$ 

### • Dimensions (WxHxD): 125x246x38 mm

VI-BOX102RP-VP

Box for wall mounted installation complete with rain cover for outdoor station mod. "ANTI-VANDAL"

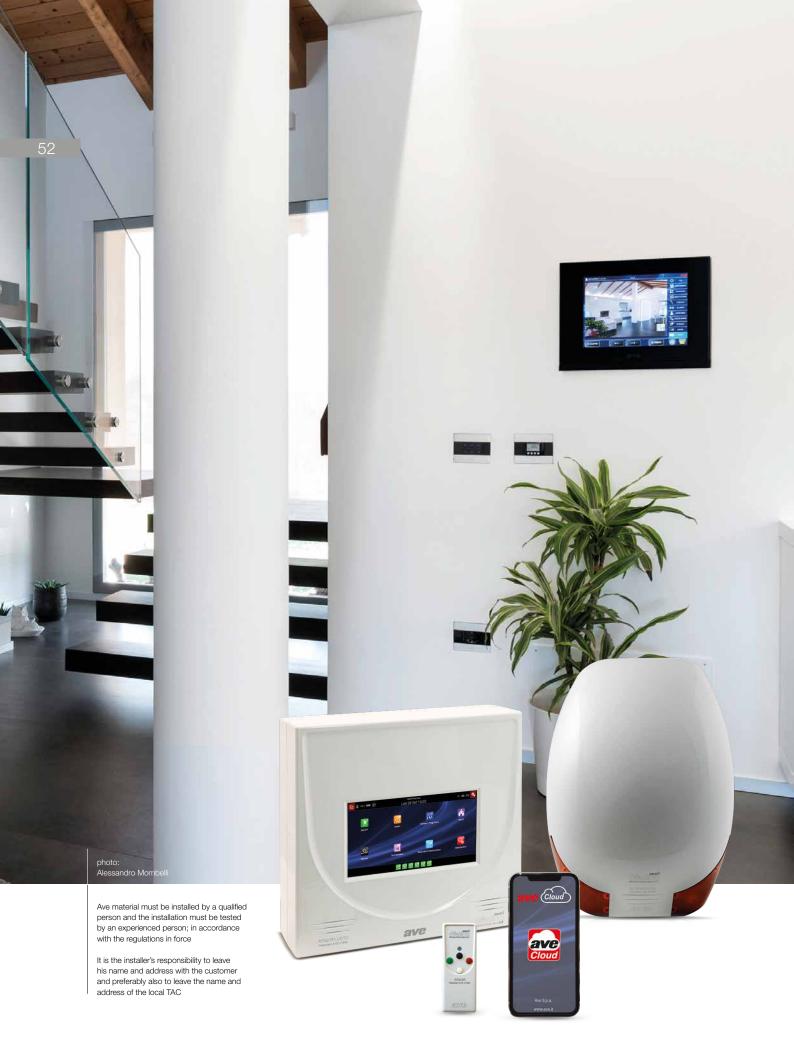
• Dimensions (WxHxD): 125x246x74 mm







51



## **DOMINA SMART ANTI-INTRUSION SYSTEM**





53

## System Description

	Product range	54
	Advantages for the installer	62
	Sizing of the system	64
	Examples of installation	66
Technical	Catalogue	
	Radio/wired control units	70
	GSM module for control units	74
	Two-way radio remote control	76
	Radio PIR detector	<b>78</b>
	Multi-function radio contact	80
	Double PIR curtain effect detector	82
	Radio interface for technical alarms	84
	Radio siren with voice messages	86
	Repeater for radio signals	88
	Diagrams of the electrical connections	90

DOMINA SMART ANTI-INTRUSION SYSTEM **System Description** 

PRODUCT RANGE



54





INTRUSION DETECTION

# AVE patent "no. 245 EU model" Wired and/or radio sirens optical and acoustic signals can be independently managed for each type of event. For example, flashing lights can be used for deterrence and flashing lights plus acoustic signal to report an alarm. RADIO Mixed radio/wired solution with a wide range of both wired and wireless detectors PIR volumetric detectors Curtain effect detectors with double PIR to protect accesses Multifunction perimeter detectors with magnet contact, 2 auxiliary inputs and magnetic tamper protection Interface for technical alarms allows connection of

any detector with dry contact

(e.g. gas detectors etc.).

DOMINA SMART ANTI-INTRUSION SYSTEM System Description

FEATURES AND ADVANTAGES

### Smart home security: the future is connected with AVE CLOUD

With DOMINA SMART ANTI-INTRUSION the world of security and that of connected objects come together to enhance the features of both through AVE CLOUD. This is the first true AVE IoT burglar alarm: a system totally integrated into your building, always ready to protect you and meet your technological needs.





Make your home even smarter with the AVE cloud APP! Interact with the anti-intrusion system from your smartphone or tablet, wherever you are and whenever you want. You can manage any function integrated in the system! And what's more: you can also control the home automation system. All from one APP.







# Managing your burglar alarm system has never been easier

While you're at work you can stay in touch with your anti-intrusion system even from a PC by keeping an Internet page open.
With your smartphone you can create various scenarios and customize them.
Furthermore, if you have also installed the AVE home automation system, when you leave, all you have to do is watch the gate close behind you.
Your house will do everything
by itself:

by lowering the blinds and activating the burglar alarm.

# AVE CLOUD, always ready to come to your aid

The installer has arrived for a change to the system programming and you are not at home? No problem. You can open the gate remotely, deactivate the burglar alarm and authorize changes. It will be like having a personal assistant available at all times. You can check from your smartphone which areas are activated, check the event memory, modify and activate scenarios.



INTRUSION DETECTION



INTEGRATED SMART IOT PLATFORM

58

• Combined platform: same method of programming and use for both anti-intrusion and home automation supervisors.









• A single CLOUD to manage home automation and burglar alarm.





A single APP to manage home automation and burglar alarm:

- The same interface on AVE supervisors and on the smartphone
- Every update performed on the control unit is automatically received by all the devices that connect to it.
- Customizable PUSH NOTIFICATIONS for all events: the system alerts you by automatically sending push notifications related to the various events (alarms, faults, etc.).



• The control unit can be managed and programmed from any iOS or Android smartphone, and/or any device equipped with a web browser.



User menu



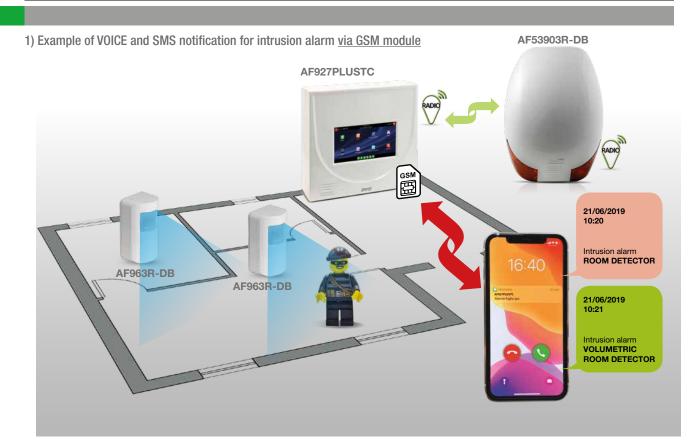


Installer menu



# DOMINA SMART ANTI-INTRUSION SYSTEM System Description

CUSTOMIZED SMS AND/OR VOICE NOTIFICATIONS VIA GSM MODULE (AFGSM04)

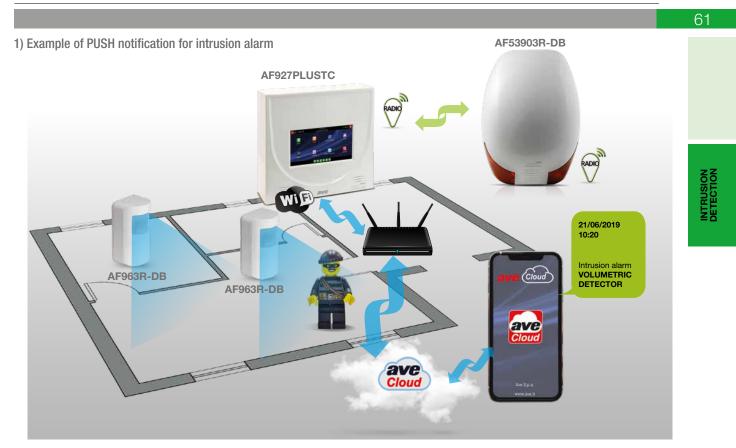


2) Example of SMS and VOICE notification for technical alarm via GSM module





# CUSTOMIZED PUSH NOTIFICATIONS VIA AVE CLOUD AND APP



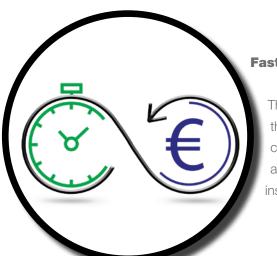
#### 2) Example of PUSH notification for technical alarm (GAS leak)



DOMINA SMART ANTI-INTRUSION SYSTEM **System Description** 

ADVANTAGES FOR THE INSTALLER





#### Fast to install

The graphic interface of the control units guides configuration and maintenance, allowing you to complete the installation guickly.

#### Easy to manage

Both locally (LAN/Wi-Fi) and remotely (Internet): all operations are simple, quick and precise, as they are carried out via the control unit and are automatically transmitted via radio to the system components.





#### Easy to propose

By scrolling through the graphics on displays, PCs, tablets or smartphones, you can see the high technology offered, far and away superior to other equipment on the market.





### FlEbsibile

RADIC

A single platfolmulanida wired (up topitatiafiourta) asia fäatie (fürpote 90 ingdesisies): ælfødis (fiseoaf 99 valisend sittivi) ractio særvis ets udlitipærrelingeridert bled fibæriaf systervia odateorine tatæste al tipo di impianto da realizzare.



#### Reliable

New two-way radio communication technology with GFSK digital protocol. Dual band transmission.

# Complete and integrated system

In addition to the wide range of devices and detectors, the system can be easily interfaced with IP Cameras with HTTP Polling protocol and AVE home automation systems for the residential and services sectors.





SYSTEM LOAD EVALUATION

#### **POWER SUPPLY UNIT**

The internal power supply unit supplies a nominal voltage of 14.5 Vdc (@100-240V - 50/60 Hz) and a nominal current of 1.6A, to facilitate calculation of total absorption for the purposes of autonomy in the absence of the mains, the following table is provided:

	Code AF927PLUS	rc	Code AF9	27PLUS	
Features of the power supply unit	14.5 V – 1.6	A (@240-100	) V – 60/50 Hz)		
Rechargeable batteries		2x2 1V – 2.2	1V – 2.2 Ah		
	Code AF927PLUS	C	Code AF927PLUS		

	Power supply condition		230 V OK		Black OUT	230V OK	Black OUT
	LCD brightness	%100	%50	%10	%0	N/a	N/a
d-by	Control unit	390 mA	300 mA	200 mA	30 mA	150 mA	20 mA
Current consumption in stand-by	Wi-Fi module	40 mA	40 mA	40 mA		40 mA	
umptior	Wired board	20 mA	20 mA	20 mA	20 mA	20 mA	20 mA
ent cons	GSM (AFGSM04) module	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA
Curre	Total	460 mA	370 mA	270 mA	60 mA	220 mA	50 mA

#### Note:

• In the event of a power failure, the Wi-Fi module is automatically switched off by the control unit for energy saving reasons.

• In order to guarantee an autonomy to the system of 24h, in the absence of mains power, it is advisable not to exceed the maximum absorption value of 180mA (with 2 x 12V 2.2Ah batteries).

 When using wired devices it is recommended not to exceed 120mA consumption. Should it be necessary to connect a larger number of devices, an additional power supply unit must be used with a back-up battery and report the fault signal of this power supply to the control unit.

#### **RECOMMENDED CABLES**

For the connections between the control unit and the system devices, use of a multicore and shielded cable type  $2x0.22+2x0.50 \text{ mm}^2$  + shielding is recommended. When selecting the sensor connection cables, the absorptions of the devices and the voltage drops must be taken into account according to the length of the portion.



AF927PLUSTC



AF927PLUS

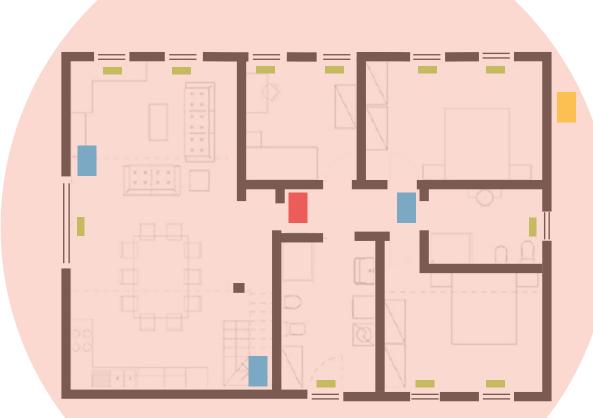




**INTRUSION DETECTION** 

#### Central anti-intrusion position: some suggestions

- It is preferable to install the burglar alarm system in a barycentric position with respect to the system itself
- In the absence of obstacles (reinforced concrete walls, stone, etc.) the maximum distance between the control unit and the detectors is 100 metres. During the installation it is advisable to check the range of the radio signal using the "field meter" function in the Test menu. If, due to obstacles, the signal is not satisfactory it is possible to install a repeater, code AFTRA03.





Radio/wired control unit

Radio volumetric detector

Outdoor radio siren

Radio perimeter detector

# DOMINA SMART ANTI-INTRUSION SYSTEM System Description

EXAMPLE 1: PROTECTION OF A TWO-ROOM APARTMENT WITH RADIO SYSTEM

 Ratio/wired control unit

 Ratio volumetric detector

 Nutdoor radio siren

 Radio perimeter detector

 Radio 2 PIR detector

#### **MATERIAL LIST**

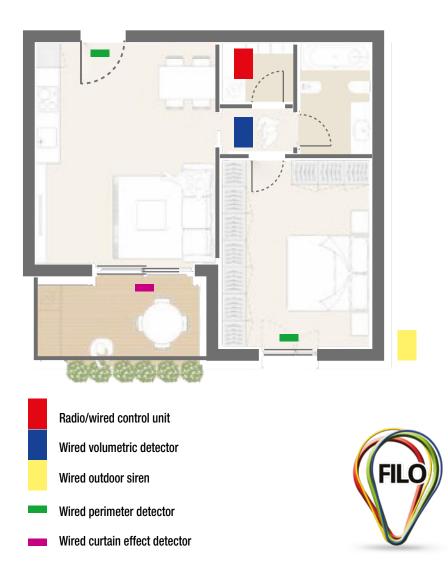
Code	Description	Q.ty
AF927PLUS	Wired/radio control unit with integrated Wi-Fi module	1
AF911	Battery for control unit - 12 V 2.2 Ah	2
AFGSM04	GSM module for control unit	1
AF53903R-DB	Radio siren with voice messages	1
AF943R	Two-way remote control	3
AF915R-DB	Multifunction radio perimeter device	2
AF930	Wired magnetic contact for armoured door (*)	1
AF965R-DB	2 PIR curtain effect detector	1
AF963R-DB	Radio PIR detector	1
AF961N	Joint for PIR detector	1

\* Note: AF930 for connection to auxiliary input of AF915R-DB contact



# EXAMPLE 2: PROTECTION OF A TWO-ROOM APARTMENT WITH WIRED SYSTEM

**INTRUSION DETECTION** 



#### **MATERIAL LIST**

Code	Description	Q.ty
AF927PLUS	Wired/radio control unit with integrated Wi-Fi module	1
AF911	Battery for control unit - 12 V 2.2 Ah	2
AFGSM04	GSM module for control unit	1
AF53900	Wired outdoor siren	1
AF911	Battery for siren - 12 V 2.2 Ah	1
AF943R	Two-way remote control	3
AF903	Wired surface magnetic contact	1
AF930	Wired magnetic contact for armoured door	1
AF973F	Wired DT curtain effect detector	1
AF963N	Wired DT detector with joint	1

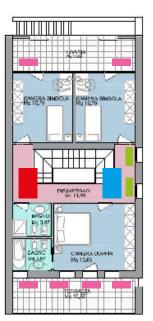


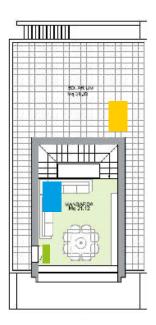
# DOMINA SMART ANTI-INTRUSION SYSTEM System Description

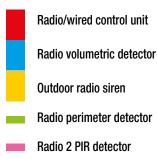
EXAMPLE 3: PROTECTION OF A TERRACED HOUSE WITH RADIO SYSTEM

68











### **MATERIAL LIST**

	Code	Description	Q.ty
	AF927PLUSTC	Wired/radio control unit with integrated Wi-Fi module	1
	AF911	Battery for control unit - 12 V 2.2 Ah	2
	AFGSM04	GSM module for control unit	1
	AF53903R-DB	Radio siren with voice messages	2
	AF943R	Two-way remote control	4
	AF915R-DB	Multifunction radio perimeter device	7
*	AF930	Wired magnetic contact for armoured door (*)	1
*	AF933	Wired magnetic contact for leaf door (*)	1
	AF965R-DB	2 PIR curtain effect detector	8
	AF963R-DB	Radio PIR detector	3
	AF961N	Joint for PIR detector	3

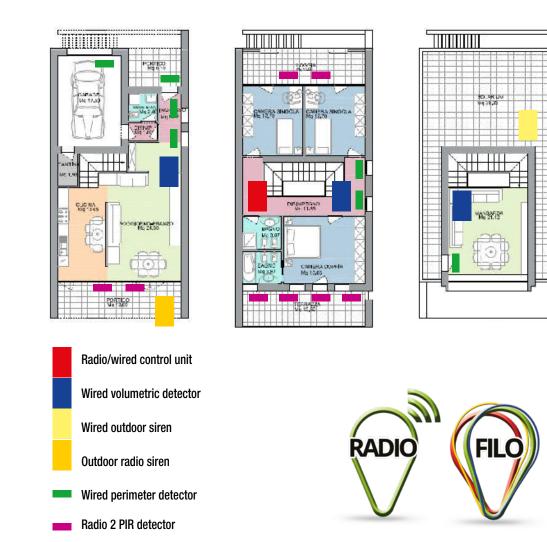
\* Note: AF930 and F933 for connection to auxiliary input of AF915R-DB contact



# EXAMPLE 4: PROTECTION OF A TERRACED HOUSE WITH MIXED RADIO/WIRED SYSTEM

69

INTRUSION DETECTION



**MATERIAL LIST** 

Code	Description	Q.ty
AF927PLUSTC	Wired/radio control unit with integrated Wi-Fi module	1
AF911	Battery for control unit - 12 V 2.2 Ah	2
AFGSM04	GSM module for control unit	1
AF53903R-DB	Radio siren with voice messages	1
AF53900	Wired outdoor siren	1
AF911	Battery for siren - 12 V 2.2 Ah	1
AF943R	Two-way remote control	4
AF903	Wired surface magnetic contact	5
AF930	Wired magnetic contact for armoured door	1
AF933	Wired magnetic contact for leaf door	1
AF965R-DB	2 PIR curtain effect detector	8
AF963N	Wired DT detector with joint	3



## TECHNICAL CATALOGUE DOMINA SMART ANTI-INTRUSION SYSTEM

RADIO/WIRED CONTROL UNITS AF927PLUS – AF927PLUSTC

**AF927PLUS/AF927PLUSTC** is a radio/wired control unit with integrated Wi-Fi module. It can manage up to 99 detectors individually identifiable via the "label" function which, appropriately programmed, shows on the display or on the control device the point of origin of the alarm (e.g.: living room, kitchen, corridor, etc.). The wired board allows management of 8 inputs with free balancing and 16 with NC balancing.

#### **TECHNICAL FEATURES**

- Primary power supply: 230 VaC -15%+10% 50/60 Hz.
- Secondary power supply: to be completed with 2 batteries 12 V/2,2 Ah cod. AF911.
  - Maximum charging time: 3 hours
    - Low battery signal at 10.9 V and recharged battery signal at 11.4 V.
- Transmission/reception RF 433 MHz/868 MHz GFSK Dual band, EU- standard 300-220-1; 300-330; 300-440, radio range in free air without interference 100m. The radio range may be significantly reduced indoors in part due to the position of the devices (detectors, sirens, etc.) in relation to the structure of the rooms.
- Radio inputs:
  - 99 radio channels 99 detectors individually identifiable with a text and/or voice label, individually delayed and with AND function.
- Wired inputs:
  - 8 double balanced wired inputs. 16 connectable devices with double function
  - 1 double balanced input for electro-mechanical wired inserter with at least 300 combinations.
- Wired outputs:
  - 1 for indoor siren control
    - 1 for outdoor self-powered siren
    - Two programmable relays for various free exchange functions (max 500 mA@12 V).
- **6 insertion areas** (1,2,3,4,5,6).
- Radio tampering detection reception of the tampering signal from each single detector reception of "alive" signals transmitted every 18 minutes and of low battery (SUPERVISION) if necessary.
- **R.F. anomalies:** continuous, simultaneous and programmable control of the 2 working frequencies.
- Code management: Power User (master user), Installer, 62 users + Anti-coercion function
- Remote controls: possibility to store 32 AF943R remote controls, individually identifiable with a text label via touch screen display or voice label.
- Memory last 500 events (non-volatile memory).
- Event messages. Voice messages can be recorded to inform the user in real time of the main events occurring at the control unit (control unit on; control unit off; door open; outdoor detector alarm; pre-alarm; tampering; new event).
- **Timing:** programmable input delay from 1 to 99 seconds programmable input delay on each detector, from 1 to 45 seconds general alarm time 3 minutes fixed time programmer: daily.
- Indoor siren: 106 dB alarm siren.
- Acoustic signals: voice messages for installation guide and user communications + low intensity buzzer.
- Integrated WI-Fi module and web server.
- Integrations:
  - Home automation system AVE DOMINAPLUS
  - From 1 to 4 IP cameras with HTTP JPEG snapshot
- Dimensional data and other features
  - dimensions: 270x262x82 mm
  - weight: AF927PLUSTC 2.0 Kg AF927PLUS 1.5 Kg
  - temperature: operating/storage: -25°+55°C Humidity 95%.







#### **POWER SUPPLY UNIT**

The internal power supply unit supplies a nominal voltage of 14.5 Vdc (@ 100 -240 V - 50/60 Hz) and a nominal current of 1.6 A, to facilitate calculation of total absorption for the purposes of autonomy in the absence of the mains, the following table is provided:

	Code AF927PLUSTC	Code AF927PLUS
Features of the power supply unit	14.5 V – 1.6 A (@240-10	0 V – 60/50 Hz)
Rechargeable batteries	ies 2x12 V – 2.2 Ah	

		Code AF927PLUSTC			Code AF927PLUS		
	Power supply condition	230 V OK		Black OUT	230 V OK	Black OUT	
	LCD brightness	%100	%50	%10	%0	N/a	N/a
d-by	Control unit	390 mA	300 mA	200 mA	30 mA	150 mA	20 mA
ı in stan	Wi-Fi module	40 mA	40 mA	40 mA		40 mA	
umptior	Wired board	20 mA	20 mA	20 mA	20 mA	20 mA	20 mA
Current consumption in stand-by	GSM (AFGSM04) module	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA
Curre	Total	460 mA	370 mA	270 mA	60 mA	220 mA	50 mA

#### Note:

• In the event of a power failure, the Wi-Fi module is automatically switched off by the control unit for energy saving reasons.

 In order to guarantee an autonomy to the system of 24h, in the absence of mains power, it is advisable not to exceed the maximum absorption value of 180mA (with 2 x 12V 2.2Ah batteries).

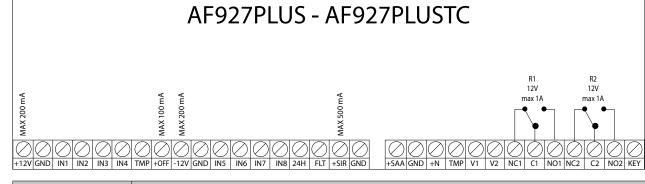
• When using wired devices it is recommended not to exceed 120 mA consumption. Should it be necessary to connect a larger number of devices, an additional power supply unit must be used with a back-up battery and report the fault signal of this power supply to the control unit.

#### **Recommended cables**

For the connections between the control unit and the system devices, use of a multicore and shielded cable type  $2x0.22+2x0.50 \text{ mm}^2 + \text{shielding}$  is recommended. When selecting the sensor connection cables, the absorptions of the devices and the voltage drops must be taken into account according to the length of the portion.

RADIO/WIRED CONTROL UNITS AF927PLUS – AF927PLUSTC

#### DESCRIPTION OF WIRED TERMINAL BOARD (INCLUDED IN THE CONTROL UNIT)



Terminal	Description	
12+V         Detectors power supply (12+ Vdc - max 200 mA)		
GND	GND	
IN1	Alarm input wired IN1	
IN2	Alarm input wired IN2	
IN3	Alarm input wired IN3	
IN4	Alarm input wired IN4	
ТМР	Tamper inputs 1,2,3 and 4	
+0FF	System status output (positive when the system is switched off) - max 100 mA	
12+V	Detectors power supply (+12 Vdc - max 200 mA)	
GND	Gnd	
IN5	Alarm input wired IN5	
IN6	Alarm input wired IN6	
IN7	Alarm input wired IN7	
IN8	Alarm input wired IN8	
24H	Tamper inputs 5,6,7 and 8	
FLT	Fault input. Balanced input with 22 k $\Omega$ resistance	
+SIR	Indoor auxiliary siren control (12 Vdc - max 500 mA)	
+SAA	Outdoor siren power supply (14 Vdc)	
GND	Gnd	
+N	Output for outdoor siren control (control missing positive)	
ТМР	Wired siren tamper - Double balanced input with 22 $k\Omega$ resistors	
V1	Not used	
V2	Not used	
GND	Gnd	
NC1	NC contact relay output 1 (max 1 A @12 Vdc)	
C1	Shared contact relay output (max 1 A @12 Vdc)	
N01	NO contact relay output 1 (max 1 A @12 Vdc)	
NC2	NC contact relay output 2 (max 1 A @12 Vdc)	
C2 Shared contact relay output 2 (max 1 A @12 Vdc)		
NO2 NO contact relay output 2 (max 1 A @12 Vdc)		
KEY Input ON OFF (Closed to GND: OFF)		



# Sistema Anti-Intrusione

Patent "no. 244 EU model"



AVE STREET

#### AF927PLUSTC



#### AF927PLUS

#### FUNCTIONAL DIAGRAM

#### AF927PLUSTC

Wired/radio control unit with integrated web server and Wi-Fi module. Power supply 230 Vac. 99 radio channels, 99 detectors individually identifiable by 7" colour touch screen LCD display and/or any device equipped with web browser.

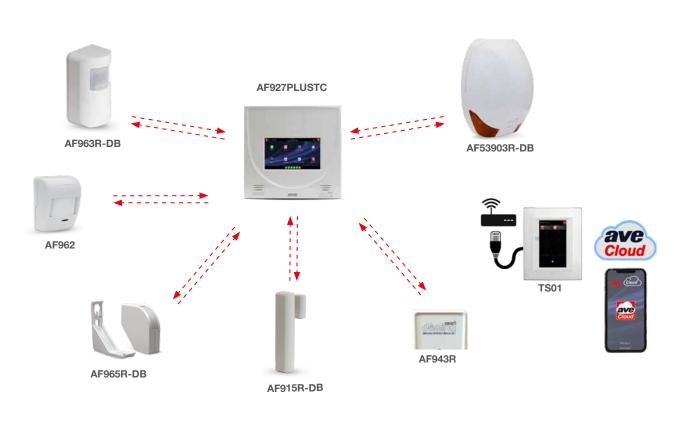
Can transmit voice messages and/or alarm SMS. 8 wired inputs (16 with double function). Balancing resistors supplied.

Voice synthesis for recording voice signals to match the messages on the display. Dual band. To be completed with 2 batteries AF911.

Complies with EN 50131-5-3, EN 50131-6, EN 50136-2, EN 50131-3 GR2/CLII. Colour RAL 9016. Dimensions 270x262x82 mm.

#### AF927PLUS

Wired/radio control unit with integrated web server and Wi-Fi module. Power supply 230 Vac. 99 radio channels, 99 detectors individually identifiable by any device equipped with web browser. Multi signalling LED on the front. Can transmit voice messages and/or alarm SMS. 8 wired inputs (16 with double function). Balancing resistors supplied. Voice synthesis for recording voice signals to match the messages. Dual band. To be completed with 2 batteries AF911. Complies with EN 50131-5-3, EN 50131-6, EN 50136-2. Colour RAL 9016. Dimensions 270x262x82 mm.



73

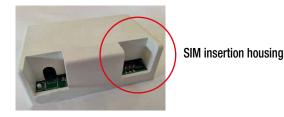


**GSM AFGSM04 MODULE** 

**AFGSM04** is a GSM 2G module for AF927PLUS and AF927PLUSTC control units. It is equipped with a comb coupling for direct connection to the control unit. The device allows SMS and voice calls to be sent and received for two-way management of the control unit. Calls and SMS messages can be customized as desired during configuration.

#### Information for correct installation

a) With the module disconnected, insert the SIM in the correct GSM module housing



b) After removing both the mains power supply and the batteries from the control unit, insert the GSM module inside it.



Compartment for GSM module



If you need to remove the GSM module: press on the hook locking the module with a pointed object.

Check that the SIM card has the pin code lock OFF.

**Technical** Features

- The AFGSM04 module sends the following reports via SMS and/or voice messages
  - Control unit on
  - Control unit off
  - Alarm
  - Voice alarm 1
  - Voice alarm 2
  - Tampering
  - Medical rescue
  - Panic rescue
  - Aggression rescue
  - Technological rescue

- Power failure
- Power back
- Battery flat
- Anomaly
- Home automation control KO
- No supervision periodic message
- SIM expiry
- Radio Interference

**NOTE:** make sure that in the room where the anti-intrusion control unit will be located, the GSM signal of the chosen operator is sufficiently strong.







# AERAA NSIDE AMTENNA INTERNA

AFGSM04

#### AFGSM04

GSM 2G module for AF927PLUS and AF927PLUSTC control units. Comb coupling to the control unit. Allows SMS and voice calls to be sent and received for two-way management of the control unit.

#### EXAMPLE OF USE





TWO-WAY RADIO REMOTE CONTROL AF943R

**AF943R** is a multi-function, two-way, portable radio transmitter suitable for controlling alarm control panels and, if interfaced with the DOMINAPLUS home automation system, for calling up any home automation scenario.

#### **Technical features**

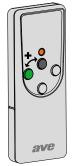
Power supply	1 x CR2032 3 V
Absorbed current at rest	< 2 μΑ
Absorbed current when on	< 55 mA
Autonomy years - approx	> 3
Radio transmission in dual frequency	GFSK Dual Band MHz 433.54-433.92; MHz 868.30-868.94
Radio range in free air without interference	> 100 m
Environmental class according to EN 50131-3 EN 50131-5-3 Safety level 2	li
Temperature operation	-10 °C +40 °C
Dimensions (WxHxD)	11 x 84 x 32 mm
Weight	20 g
IP	40

#### FUNCTIONS AVAILABLE:













Up to 6 functions can be customized and called up from:

- Activation (even partial)
- Deactivation
- Partializations
- Doctor
- Panic
- Robbery
- Home automation (for relay control)
- Home automation scenarios
- Automation.



## Sistema Antintrusione Anti-intrusion Sustem

#### Patent "no. 246 EU model"



AF943R

#### AF943R

4-button remote control for radio system. Allows control of the radio control units. Rolling Code code change mode. Two-way dialogue with the radio range control units. On-board system status indication via LED. Battery: 1xCR2032 included. Colour RAL 7035. Dimensions 11x84x32 mm

#### **MULTIFUNCTION REMOTE CONTROL - INTERACTION WITH HOME AUTOMATION**

The same remote control can be used to switch the burglar alarm on/off and also to call up home automation scenarios (if the control unit is interfaced with the AVE DOMINAPLUS home automation system). For example, it is possible to run in the same system:

#### (a) Switching off the anti-intrusion system



b) Activate the "EXIT" home automation scenario: switching off all lights, closing of all shutters, activation of the anti-intrusion system.





**RADIO PIR DETECTOR AF963R-DB** 

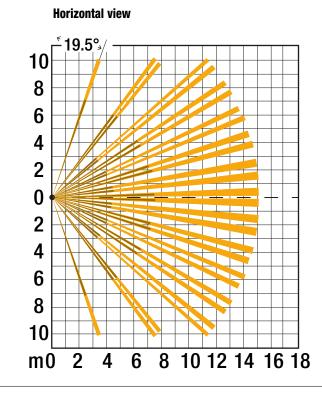
**AF963R-DB** is a passive wireless infrared detector designed to detect human intrusion in the protected area and transmit an alarm via radio. Equipped with a special joint AF961N, allows a wide flexibility of installation.

#### **Technical features**

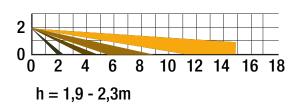
Power supply	1 x CR123 3 V (1.4 Ah)
Absorbed current at rest	< 20 μA
Absorbed current when on	< 55 mA
Autonomy years - approx	> 4
Supervision	18 minutes
Radio transmission in dual frequency	GFSK Dual Band MHz 433.54-433.92; MHz 868.30 -868.94
Radio range in free air without interference	> 100 m
Insulation (class)	Ш
Environmental class according to EN 50131-2-2, EN 50131-5-3 Safety level 2	III
Temperature operation	-10 °C +40 °C
Dimensions (WxHxD)	68 x 51 x 112 mm
Weight	160 g
IP	42

#### **Cover diagram**





Vertical view









**INTRUSION DETECTION** 





AF963R-DB

#### AF963R-DB

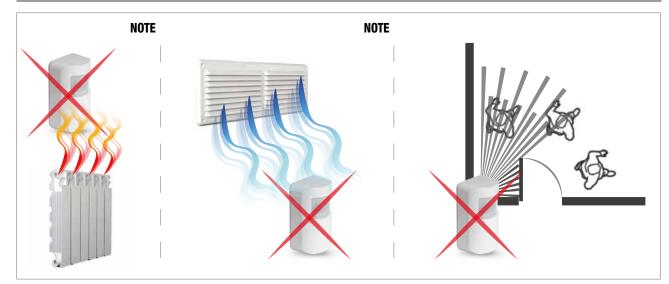
Radio PIR detector. Dual frequency transmission, Dual Band. Battery: 1xCR123 included. Colour RAL 9016. Dimensions: 68 x 51 x 112 mm

#### AF961N

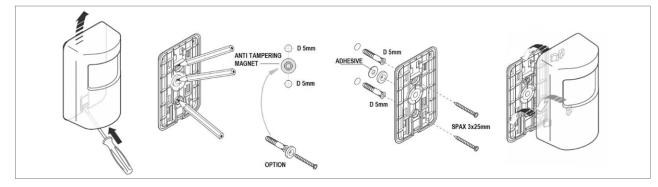
Angular joint for detector AF963R-DB. Dimensions: 68 x 51 x 112 mm

AF961N

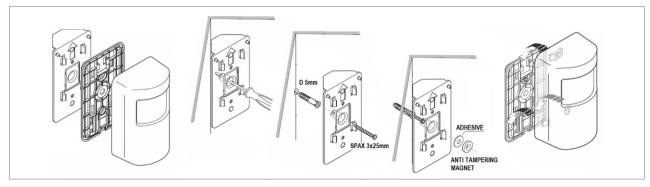
#### INFORMATION FOR CORRECT INSTALLATION



#### Wall installation



#### **Corner installation**





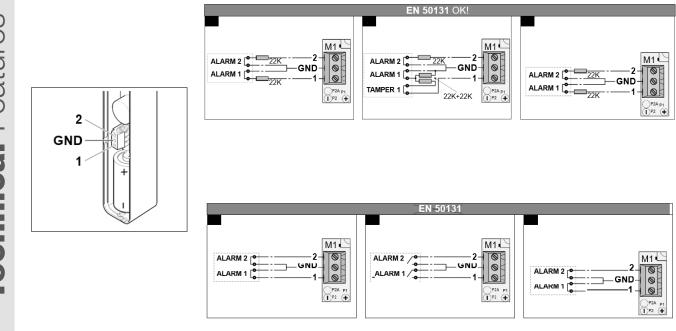
MULTIFUNCTION RADIO CONTACT AF915R-DB - AF915R-MDB

AF915R-DB/AF915R-MDB is a radio device, suitable for protecting fixtures (doors/windows). Properly installed it detects the opening and / or breaking and entering of the same. It also has two wired inputs to which other magnetic contacts and/or roller shutter sensors can be connected, to increase the protection of the system (e.g. shutter and window protection).

#### **Technical features**

Power supply	1 x CR123 3 V (1.4 Ah)
Absorbed current at rest	< 20 μA
Absorbed current when on	< 55 mA
Autonomy years - approx	> 4
Supervision	18 minutes
Radio transmission in dual frequency	GFSK Dual Band MHz 433.54-433.92; MHz 868.30 -868.94
Radio range in free air without interference	> 100 m
Insulation (class)	III
Environmental class according to EN 50131-2-6, EN 50131-5-3 Safety level 2	II
Temperature operation	-10 °C +40 °C
Dimensions (WxHxD)	23 x 25 x 134 mm
Weight	120 g
IP	40

#### HOW TO USE THE AUXILIARY CONTACT INPUTS



**Technical** Features







81



#### AF915R-DB

Radio perimeter detector - white. Dual frequency transmission (Dual Band). Differentiated alarm signal for magnetic contact and 2 auxiliary inputs of the terminal board. Double reed, one of which for magnetic tamper function. Battery: 1xCR123 included. Colour RAL 9016. Dimensions of the contact: 23 x 25 x 134 mm

#### AF915R-MDB

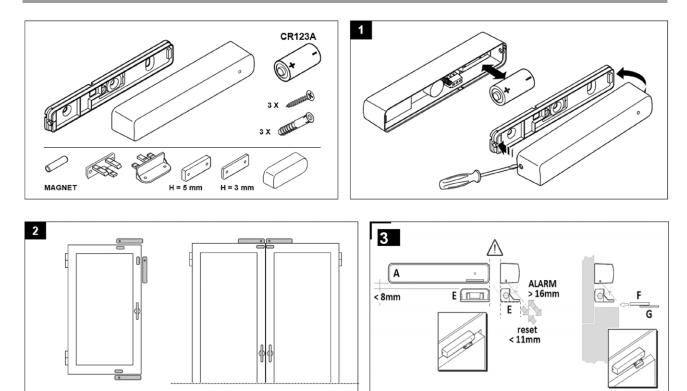
Radio perimeter detector- as above brown (RAL 8015).

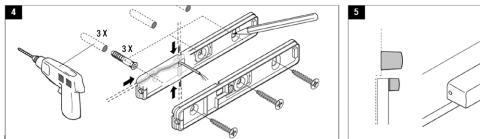
AF915R-DB

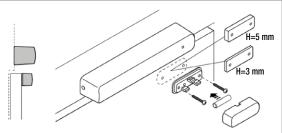
AF915R-MDB

INTRUSION DETECTION

#### INFORMATION FOR CORRECT INSTALLATION









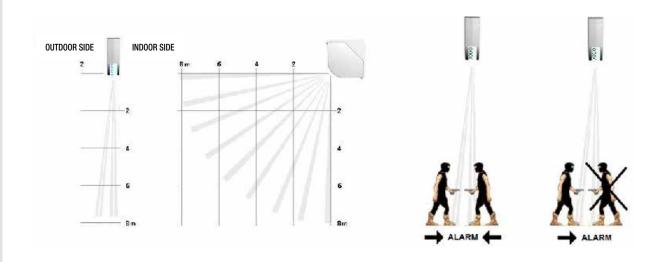
CURTAIN EFFECT DETECTOR WITH DOUBLE PIR AF965R-DB

**AF965R-DB** is a dual PIR (passive infra-red detector) volumetric motion detector. The specific design of the device makes it particularly suitable for installation in a corner of doors and windows to signal passage through the same, it is thus a valid and discreet protection for any access.

#### **Technical features**

Power supply	1 x CR123 3 V (1.4 Ah)
Absorbed current at rest	< 30 µA
Absorbed current when on	< 55 mA
Autonomy years - approx	> 3
Supervision	18 minutes
Radio transmission in dual frequency	GFSK Dual Band MHz 433.54-433.92; MHz 868.30-868.94
Radio range in free air without interference	> 100 m
Insulation (class)	III
Environmental class according to EN 50131-2 -2 EN 50131-5-3 Safety level 2	III
Temperature operation	-10 °C +40 °C
Dimensions (WxHxD)	79 x 23 x 79 mm
Weight	160 g
IP	42

COVER DIAGRAM AND FUNCTION



Note: The alarm is triggered by crossing both barriers created by the IR-P sensors, or first the outdoor one, then the indoor one (not the opposite).







83

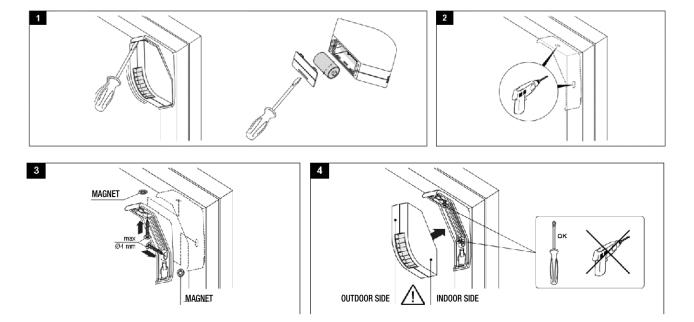


AF965R-DB

#### AF965R-DB

Dual band radio perimeter detector with dual sensor PIR and anti-blinding. The alarm is triggered by crossing both barriers created by the IR-P sensors, or first the outdoor one, then the indoor one (not the opposite):the two options can be selected according to use. Range 8 m. Environmental class III (outdoor sheltered). Battery: 1xCR123 included. Colour RAL 9016. Dimensions: 79x23x79 mm

INFORMATION FOR CORRECT INSTALLATION





RADIO INTERFACE FOR TECHNICAL ALARMS AFTR02

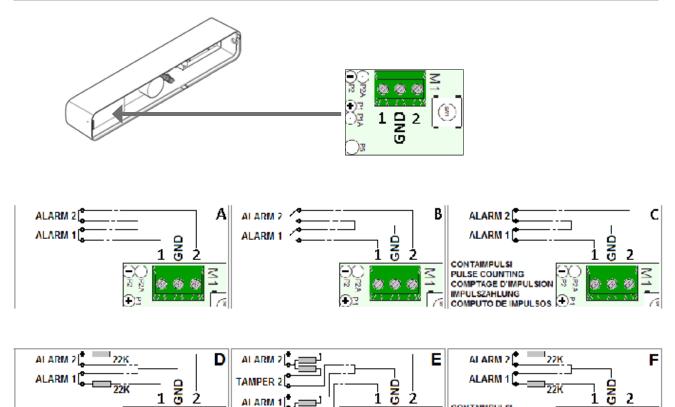
**AFTR02** is a radio interface suitable for transmitting technical alarms, generated by any type of sensor by opening/closing a potential-free electrical contact, to the control unit.

#### **Technical features**

Power supply	1 x CR123 3 V (1.4 Ah)
Absorbed current at rest	< 20 μA
Absorbed current when on	< 55 mA
Autonomy years - approx	> 4
Supervision	18 minutes
Radio transmission in dual frequency	GFSK Dual Band MHz 433.54-433.92; MHz 868.30-868.94
Radio range in free air without interference	> 100 m
Insulation (class)	III
Temperature operation	-10 °C +40 °C
Dimensions (WxHxD)	23 x 25 x 134 mm
Weight	120 g
IP	40



Ň



3

î

22K+22K

TAMPER 1

CONTAIMPULSI PULSE COUNTING

**IMPULSZAHLUNG** 

COMPTAGE D'IMPUI

COMPUTO DE IMPL

3

7

1





Radio interface for technical alarms-white Dual frequency transmission (Dual Band). Differentiated alarm signal for the 2 auxiliary inputs of the terminal board. Allows interfacing of any technical alarm with potential-free contact output. Battery: 1xCR123 included.

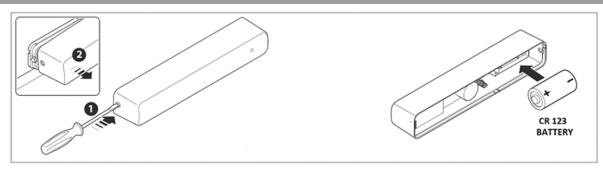


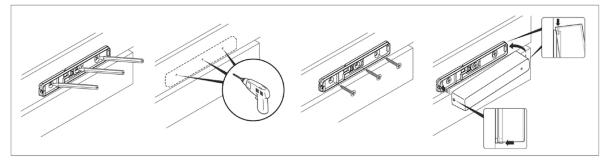
AFTR02

## Colour RAL 9016. Dimensions of the contact: 23 x 25 x 134 mm

AFTR02

INFORMATION FOR CORRECT INSTALLATION





#### EXAMPLE OF USE





RADIO SIREN WITH VOICE MESSAGES AF53903R-DB

**AF53903R-DB** is a radio siren, a component of the alarm system, with high acoustic level, able to reproduce voice messages: equipped with LED flashing light, it is designed to signal the alarm status and deter the intruder.

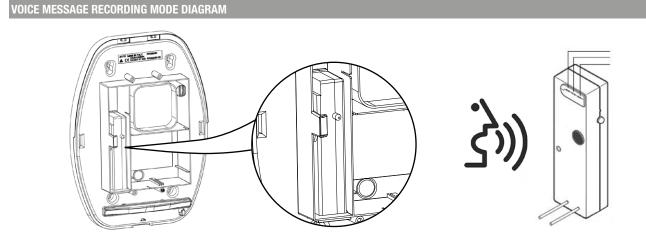
#### **Technical features**

Power supply	6 x LR 20 1.5 V (16Ah)
Absorbed current at rest	< 360 μA
Absorbed current when on	< 660 mA
Autonomy years - approx	> 4
Supervision	18 minutes
Radio transmission in dual frequency	GFSK Dual Band MHz 433.54-433.92; MHz 868.30-868.94
Radio range in free air without interference	> 100 m
Insulation (class)	
Environmental class according to EN 50131-4 Safety level 2	III
Temperature operation	-25 °C +55 °C
Dimensions (WxHxD)	350 x 100 x 240 mm



Optical and acoustic signals can be independently managed for each type of event. For example, flashing lights can be used for deterrence and flashing lights plus acoustic signal to report an alarm.

AVE patent "no. 245 EU model"





## Sistema Antintrusione Anti-intrusion System

### Patent "no. 245 EU model"

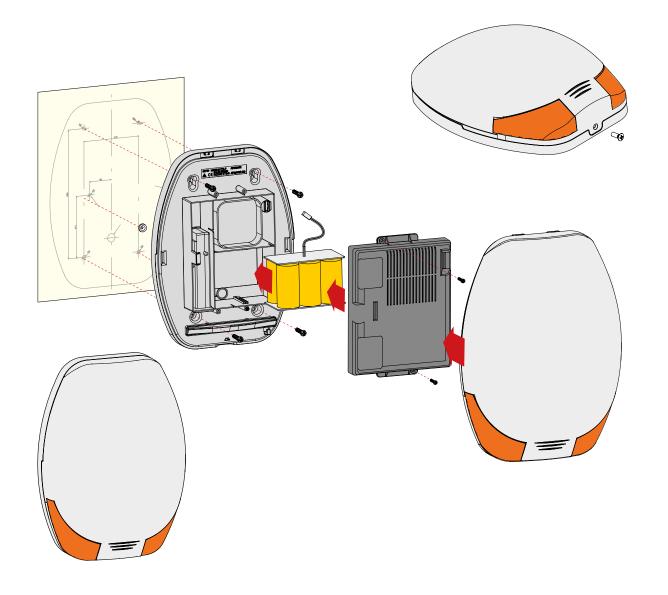




#### AF53903R-DB

Dual band radio siren with voice messages Optical and acoustic signals can be independently selected for each type of event. Batteries: 6XLR20 included. Colour RAL 9016. Dimensions 350 x 100 x 240 mm.

INFORMATION FOR CORRECT INSTALLATION



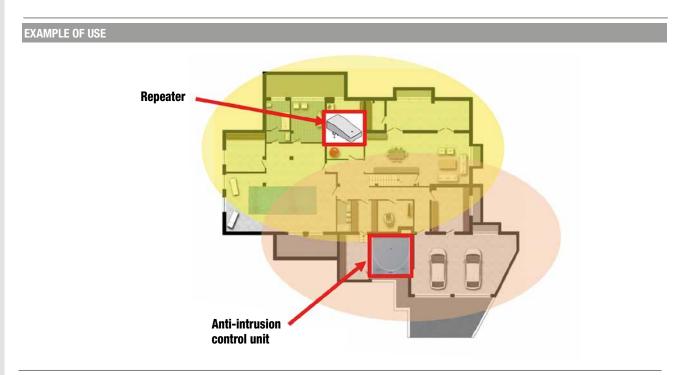


**REPEATER FOR RADIO SIGNALS AFTRA03** 

**AFTRA03** is a Dual Band repeater that allows the radio range between the alarm control unit and the devices connected to it to be extended (to solve problems related to excessive distance and/or the presence of obstacles). The device operates at 230V, it is also equipped with an internal battery that allows operation even in the absence of mains voltage for several hours, ensuring continuity of communication between the various devices of the system.

#### **Technical features**

Power supply	230 Vac, 60-50 Hz PS Type B + Back-up battery CR123 3 V 1.4 Ah
Consumption with mains power supply	1.8 W
Absorbed current in standby with battery power supply	23 mA
Absorbed current in transmission	< 55 mA
Autonomy hours - approx	48
Supervision	18 minutes
Radio transmission in dual frequency	GFSK Dual Band MHz 433.54-433.92; MHz 868.30-868.94
Radio range in free air without interference	> 100 m
Insulation (class)	l
Environmental class according to EN 50131-3, EN 50131-6, EN 50131-5-3 Safety level 2	I
Temperature operation	-10 °C +40 °C
Dimensions (WxHxD)	121 x 55 x 35(+32 mm) mm
Weight	200 g
IP	51









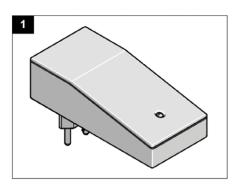


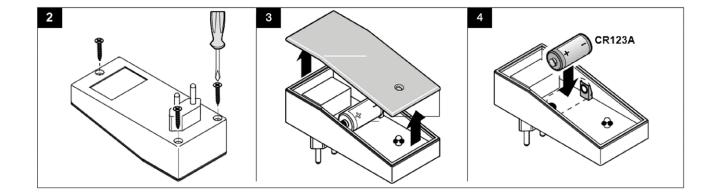
AFTRA03

#### AFTRA03

Dual band radio signal repeater. Increases the transmission range of the transmitters. Power supply: 230 V ac Comes with back-up battery (CR123 3 V / 1.4 Ah). Colour RAL 9010. Dimensions 121 x 55 x 67 mm.

INFORMATION FOR CORRECT INSTALLATION



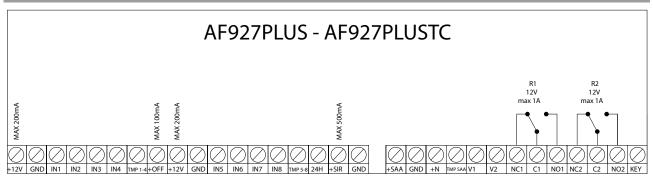




## TECHNICAL CATALOGUE Domina smart anti-intrusion system

DIAGRAMS OF THE ELECTRICAL CONNECTIONS

WIRED TERMINAL BOARD

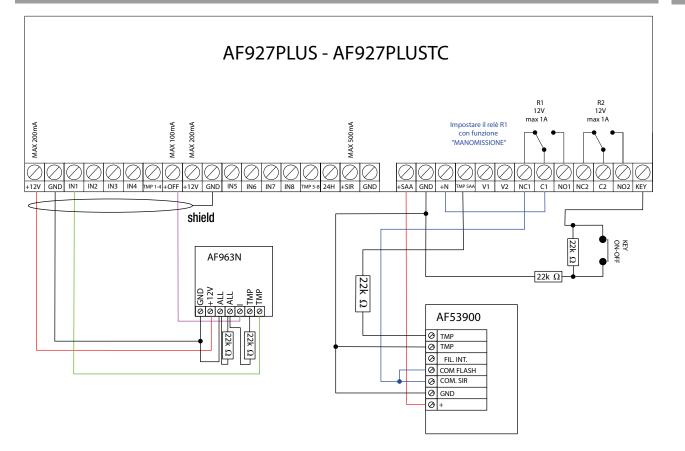


Terminal	Description
12+V	Detectors power supply (+12 Vdc - max 200 mA)
GND	GND
IN1	Alarm input wired IN1
IN2	Alarm input wired IN2
IN3	Alarm input wired IN3
IN4	Alarm input wired IN4
TMP 1-4	Tamper inputs 1,2,3 and 4
+0FF	System status output (positive when the system is switched off) - max 100 mA
+12V	Detectors power supply (+12 Vdc - max 200 mA)
GND	Gnd
IN5	Alarm input wired IN5
IN6	Alarm input wired IN6
IN7	Alarm input wired IN7
IN8	Alarm input wired IN8
TMP 5-8	Tamper inputs 5,6,7 and 8
24H	Fault input. Balanced input with 22 k $\Omega$ resistance
+SIR	Indoor auxiliary siren control (12 Vdc - max 500 mA)
+SAA	Outdoor siren power supply (14 Vdc)
GND	Gnd
+N	Output for outdoor siren control (control missing positive)
TMP SAA	Wired siren tamper - Double balanced input with 22 $k\Omega$ resistors
V1	Not used
V2	Not used
GND	Gnd
NC1	NC contact relay output 1 (max 1 A @12 Vdc)
C1	Shared contact relay output (max 1 A @12 Vdc)
N01	NA contact relay output 1 (max 1 A @12 Vdc)
NC2	NC contact relay output 2 (max 1 A @12 Vdc)
C2	Shared contact relay output 2 (max 1 A @12 Vdc)
N02	NA contact relay output 2 (max 1 A @12 Vdc)
KEY	Input ON OFF (Closed to GND: OFF)





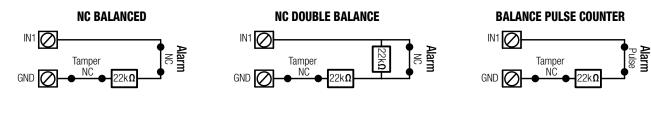
EXAMPLE OF CONNECTION



Note: use only shielded cables to connect the detectors to the control unit. The cable shield must be connected to GND from the central side only.

INPUT CONNECTION TYPES FOR CORRECT BALANCING

IN1



**NC DOUBLE** Alarm 1 Alarm 1b NC NC Tamper1 Tamper1b NC NC 22k**Ω** 10k**Ω** Detector 1 **Detector 1b** GND

Note: the diagrams shown for balancing the inputs are related to the main connection methods used in the security systems. The control unit can also manage other types of connection (e.g. NO, NC): refer to the complete manual for further details.

Note: the DOUBLE NC setting allows the connection of two different detectors to a single input. The two detectors are individually identified by description and can also be associated to different areas.

**INTRUSION DETECTION** 











### AVE S.p.A.

Via Mazzini, 75 - 25086 Rezzato (Brescia) - Italy tel. +3903024981- fax +390302792605 info@ave.it

**Sales Offices Italy** tel. 0302498337 - 0302498343 - fax 0302792837 vendite@ave.it

> Export Department ph.+3903024981 export@ave.it



CEI







For further information see the websites

www.ave.it www.avetouch.it

see the new home automation website www.domoticaplus.it www.domoticahotel.com









**100** ITALIAN EXCELLENCE



www.ave.it +39 030 24981 www.avetouch.it



