



## HOME AUTOMATION CATALOGUE 2017







## CAME DOMOTIC 3.0 A SYSTEM DESIGNED FOR LIVING YOUR LIFE IN HARMONY

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# WE SPEAK ABOUT QUALITY LIVING

CAME has enhanced people's desire for automation for over 60 years by using technology as a key to a quality life. All our projects and ideas drive our innovation and focus to make people's lives as comfortable as possible. This mission is crystal clear, yet complex. And this is where our company's skills and experience come into play. We know how to blend functionality and design to keep our quality at state-of-theart levels. These are ambitious projects. They testify as to the importance of being forward-looking - within the realms of reality – to build works that make us proud of what we do. Technological works that we've partnered with the current trendsetter, who are changing the way we approach the world.





## CAME <sup>†</sup> URBACO CAME <sup>†</sup> PARKARE CAME <sup>†</sup> GO CAME <sup>†</sup> BPT





# **CAME A BRAND NEW FUTURE**.



From a multi-brand group to a global brand, CAME's new identity is all about ground-breaking innovation. We are headed towards new opportunities.

A step ahead in looking at the world of automation in fresh, new ways, through **the four laws of Human Automation** that support a new quality of life, designed **around people**, **because it's made by people**.

Our Group is made up of key players, all driven by the same motivation: to provide technological solutions to ensure **comfort, safety and performance to all settings,** whether at home, at work or in town.

We share common goals which override each of our specific skills. The sheer diversity makes it a truly remarkable organization. **One, great global-company.** 



#### Be technology. Stay human.

When a Group made up of many branches decides to speak to the world with one voice, it must take great care over its tone, message and audience. Knowing that being united is greater than the sum of its parts, and that the future is stronger, when it is built on solid values.



# STATEMENT

Our multinational role is to supply integrated, technological solutions to automate single homes, public venues and city squares. All of this is to create intelligent environments to benefit people.

# MISSION

We help people to automate residential, public and urban environments, and make the areas smarter through integrated technological solutions that guarantee convenience, security and performance.

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# VISION

The perfect connection between man and technology allows us to place **people and their well-being at the centre of everything.** 



# CARE

# PEOPLE ARE THE MEASURE FOR DEFINING AUTOMATION.

Every technology must be designed for people. The will to better ourselves, to excel technically, will never reduce the central role that people play in everything we do.

## Life inspires us.

In a world where technology rules, we're putting people back at the center of things. Those people that staff all our branches worldwide, our collaborators, our researchers and developers, our customers. It's by thinking about how we like to live, that we come up with the right technological solutions to improve the quality of our daily lives. It's by re-engineering our habits, our places and venues that we can come up with such a ubiquitous, yet low-key technology. From this delicate balance, we create new standards for protecting and caring for our own lives.



## ACTION EVERY AUTOMATION SOLUTION MUST ANTICIPATE PEOPLE.

Automation is never a passive or static technology. We must succeed in meeting peoples' needs in advance by anticipating expectations and solutions.

## That's everywhere, by all means.

Our drive, to find innovative solutions before the need arises, is a matter of sensitivity and focus. It's about forecasting a future that is now rushing to meet us. Technology must be always able to distinguish diversity in venues and uses. Whether it's in residential, public or city settings, it needs to make such a place pleasant and habitable. What ensues is, **CAME Connect**, the Cloud technology for remotely exploiting all the functions of your installed devices. This means great advantages for installers and users. Once again, CAME technology drives the quality of our lifestyles.



# MULTICULTURAL

## EVERY AUTOMATION MUST RESPECT OUR WORLD'S CULTURES.

Automation must integrate into every cultural context to dismantle barriers of diversity. We must create solutions that enhance and respect people as unique and global human beings.

## Worldwide, together.

CAME is deeply rooted in the Italian province of Treviso. Yet its 26 business units, its capillary distribution network, its six production plants in Italy, France, Spain and England, and its sales operations based in 118 countries give the organization a broad cultural perspective, which enables the company to respond in timely and effective fashion to the global challenges by offering cutting-edge solutions, that are customdesigned for the needs of each market.



# EXPERIENCE

AUTOMATION IS THERE TO FREE-UP PEOPLE TO BE MORE THEMSELVES.

Technology should not be invasive, or limiting to people. We believe that our operators should blend with users' lifestyles and their thinking.

## Freedom in not just a state of mind.

In our world we don't limit our thinking, we don't separate places or label our desires. Our diversities are source of wealth and create a unique urban setting where people share a wide range of views and explore all possibilities. Technology is there to improve our lifestyles, it facilitates our actions and it helps us to reach every accessible space in our homes, towns and venues. It contributes to define a new concept of security and to the sharing of ideas that brings to new achievements.



## CAME DOMOTIC 3.0 - INNOVATIVE SYSTEM ARCHITECTURE



The CAME home-automation system features an especially innovative architecture which makes it easy to use and install. It can be easily expanded while providing unmatched performance levels. From this year, besides the home-automation modules which are designed to provide comfort, security and savings, the system also features the ETI/DOMO system server that stores the intelligence needed to supervise all of the installed apparatuses. This server is, on one hand, connected to a LAN (Local Area Network) to exploit all of its speed characteristics and scope, and on the other, to the field bus which is reserved for home-automation modules, so that they can talk to each other autonomously and securely. Management and control of the system can be done by connecting the LAN to the server of the new TS7 and TS10 touch-screen terminals. Alternatively, or additionally, to the terminals you can connect the system server via a Wi-Fi connection through hand-held devices such as tablets or smartphones running the CAME DOMOTIC App, as it features the same graphic-interface control system featured on the terminals.





## TECHNOLOGY TO MANAGE YOUR HOME WHEN YOU'RE AWAY FROM HOME





Users can enjoy all of the functions on the installed devices either on-site or via remote. CAME Group has developed a Cloud service that users can link up, easily, safely and reliably, with their systems, from anywhere in the world. The system server merges cutting-edge CAME Connect technology, which ensures that your home automation system connects to the Cloud. With a few clicks, users can connect to the Cloud via their own smartphones or tablets after downloading the corresponding **CAME DOMOTIC App** which provides a secure system-graphics interface. Furthermore, installers can diagnose system faults and pinpoint malfunctions to intervene efficiently, with a simple internet connection.

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## ALL OF THE SYSTEM'S FUNCTIONS



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## COMFORT AND WELLBEING

LIGHTING

PERATOR

SOUND SYSTEM

#### REMOTE CONTROL

When speaking about comfort and home-automation, many of us immediately think about managing the operators from a terminal or from a handheld device whether we are managing single lights, shutters, awnings, or even multiple, centralized devices, such as with scenarios. The **CAME DOMOTIC 3.0** system provides a lot more: remote management thanks to the **CAME DOMOTIC App**, management and control of electrical loads with scheduling, and tele-assistance from the office. All these functions provide constant monitoring of one's home and offer the opportunity to interact from one's car, office or holiday location. With **CAME DOMOTIC 3.0** system **3.0** everything is under control, always.

## SECURITY

#### VIDEO ENTRY SYSTEMS

TECHNICAL ALARMS

#### CONTROL UNITS

The capacity of the **CAME DOMOTIC 3.0** home-automation system to be perfectly compatible with CAME and Bpt security systems, means it perfectly integrates with them, seamlessly to smoothly control both systems, even simultaneously, via a single terminals. The **CAME DOMOTIC 3.0** system's securty Home automation **CAME DOMOTIC 3.0**: wholly integrated for your peace of mind.

SAVINGS			
TEMPERATURE CONTROL	MONITORING	POWER MANAGEMENT	IRRIGATION

Less consumption, more energy efficiency, more value to your home. CAME DOMOTIC 3.0 home automation optimizes power consumption though its integrated home-management system. The system manages and organizes consumptions, checks electrical loads and sets limits via a simple, intuitive interface. That's how you can control your utilities according to specific needs, and reduce waste depending on the climate and indoor and outdoor lighting conditions, thus improving the energy efficiency class and the building's economic value. This means major savings for users.

### THE SYSTEM'S PLUSES



## DEVICES AND APPLICATIONS FOR ENERGY EFFICIENCY

There are energy savings to be had here. Specific devices display the power consumed by water and gas and other utilities. This gives your terminals their own, real, "Power dashboard". The temperature and lighting control devices have broad and articulated ranges which means you can reach very high, energy-efficiency standards. This ensures a quick return on investment from the system, which is entirely designed and built to meet the requirements of "energy performance of buildings" and "impact of building automation controls and building management" set forth in the EN 15232 regulatory standard, and that of the CEI 205-18 "guide to making automation systems for technical systems in buildings. Identifying the functional schemes and assessing the contribution to reducing a building's power needs".



## INTEGRATION WITH BURGLARPROOF SYSTEMS

You can connect the LAN to Bpt's Proxinet and CAME'S CP burglar-alarm control units, to centrally control both systems. This connection also enables a reciprocal exchange of information between the two systems. You can program actions on the home-automation system that will take place when certain events in your security system happen, such as, for example, switching on the garden lights when an outdoor barrier detects and intrusion. You can also program scenarios that act on both systems, such as, for example the "GOING OUT" scenario, that with a single command lets you switch off the lights, lower the shutters, arm the burglar alarm, and so on. In this way the home-automation and burglar-alarm systems are perfectly integrated yet conserve their own system autonomy while staying compliant with their respective product regulatory standards.

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## INTEGRATION WITH VIDEO ENTRY SYSTEMS

The specific ETI/DOMO XIP system server, besides offering the functionalities described for the ETI/DOMO, lets you integrate Bpt's IP video entry system. In this way the touch-screen terminal works as an internal derivative and talks with the various external entry panels. Even in this case the function is available through handheld devices.



## WIRELESS SOLUTIONS

To retrofit the home-automation, comfort and security functions offered by the system, where even small-scale masonry work is not an option, the range also offers a series of radio devices to provide multiple wireless solutions. The radio modules, powered by the municipal power grid, integrate perfectly into the traditional electrical system and let you set up an easily installed wireless-network without needing a PC. For complex systems that require advanced functionalities on significant extensions, the radio modules can also communicate with the wired home-automation modules, resulting in simple installation and complete functionality advantages. Thanks to this hybrid radio/wired network, we overcome any structural limitations created by the building's structure.



## A CLOUD-ORIENTED SYSTEM FOR TOTAL REMOTE CONTROL

**CAME CONNECT** technology connects the **CAME DOMOTIC 3.0** home-automation system to the **CAME Cloud**. Now you can remotely control your entire system, and installers can remotely run checks, diagnostics and fixes.



## CONTROL MODULES WITH TOUCH-SENSITIVE KEYS

The **CAME DOMOTIC 3.0** system features modern control devices, made with touch buttons on glass plaques of different colors, housed in corresponding, standard, box-frames. Their sleek design and elegant lines makes them perfectly suitable for any furnishing style, while still adding an element of distinction.





## **THE ADVANTAGES**

SIMPLICITY

- Easy to install, program and expand.
  - Easy to use at home and when you're away.

## ADDED VALUE

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- Qualify your professional status.
- Bespoke design, high-performance plus cutting-edge technology. Total comfort, wellbeing and security.

## CONVENIENCE



Reduces estimate proposal, installation and commissioning times. The price to quality ratio is unbeatable.

It optimizes overall consumption and gives you a quick return on your investment.





## **OPERATORS**

## **ONE CONTROL FOR YOUR ENTIRE HOME!**



Automation functions are surely among the fundamental components of a home-automation system. Today a series of dedicated products, bring all these functions into your home, to provide comfort and wellbeing.

All of the regular or dimmerable light points, the shutter or awning motors, the gates and automated doors can thus be controlled from a single point or from several points around the home. Unlike traditional electrical systems with fixed controls, now you can use programmable logics, variable positions and expandable functions, depending on our needs. The system now adapts and grows according the needs of that actually live in the home. You can now manage the system via one-touch solution scenarios. Launch scenarios - for switching off lights, lowering shutters and arming the burglar alarm in the zones that you want protected - before exiting your home or going to bed. From today, all this just takes one command, from one point. No more having to move around the entire house. Moreover, since all of the installed devices are connected via one bus cable, you can expand and upgrade the system, at any time, to fit changing needs or lifestyles, whether the home is finished, furnished, inhabited or, restructured.

## **CONTROL MODULES WITH TOUCH-SENSITIVE KEYS**

The **CAME DOMOTIC 3.0** home automation system features state-of-the-art control devices, that work via input modules that are integrated into the touch-screen glass plate. It comes in various colors and fits any standard industry mounting boxes. The sleek design and attractive lines of these devices fit with all furnishings and, in and of themselves, are elements of decor.

## OH/6ITC WH - OH/3ITC WH - OH/4ITC WH - OH/2ITC WH modules

Glass plate with either 3 or 6 touchsensitive controls and built-in control module Standard three-module box



Brace for standard three-module box.



Version for three-module rectangular box



Version for round box (60 mm diameter)



INSTALLATION EXAMPLE

#### Motion sensor

To cut consumption to a minimum, the device only activates when someone reaches a hand close to the device.



Touch-sensitive control with state indicator Each command appears as an LED which shows the status (ON/OFF) of the controlled load.

# AUXILIARY POWER-SUPPLY 12 - 24 V DC

The device's direct connection to the home-automation bus makes for simple installation. The auxiliary powersupply ensures stable and efficient operation without varying the maximum number of modules that are connectable to that branch of the system.

#### MODULE WITH SIX CONTROLS ON BLACK GLASS PLATE

#### MODULE WITH SIX CONTROLS ON WHITE GLASS PLATE



#### CODE: 67600490

#### ID: OH/6ITC BK

It features six digital inputs controlled by touch-sensitive keys on the glass plate. Each single input can be programmed with all the functions available to the system. The keys have an LED to show the on/off state of their corresponding controlled output. To cut consumption to a minimum, the LEDs light up via a sensor, only when the user reaches out a hand to the device. Direct bus connection. Auxiliary power-supply 12÷24. Installation on standard 3-module rectangular box. Black.

#### Dimensions: 120 x 80 mm

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#### CODE: 67600510

#### ID: OH/6ITC WH

It features six digital inputs controlled by touch-sensitive keys on the glass plate. Each single input can be programmed with all the functions available to the system. The keys have an LED to show the on/off state of their corresponding controlled output. To cut consumption to a minimum, the LEDs light up via a sensor, only when the user reaches out a hand to the device. Direct bus connection. Auxiliary power-supply 12÷24. Installation on standard 3-module rectangular box. White.

Dimensions: 120 x 80 mm

#### MODULE WITH THREE CONTROLS ON BLACK GLASS PLATE





MODULE WITH THREE CONTROLS ON WHITE GLASS PLATE

#### CODE: 67600520

#### **ID: OH/3ITC BK**

It features three digital inputs controlled by touchsensitive keys on the glass plate. Each single input can be programmed with all the functions available to the system. The keys have an LED to show the on/off state of their corresponding controlled output. To cut consumption to a minimum, the LEDs light up via a sensor, only when the user reaches out a hand to the device. Direct bus connection. Auxiliary power-supply 12÷24. Installation on standard 3-module rectangular box. Black.

Dimensions: 120 x 80 mm

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#### CODE: 67600530

#### ID: OH/3ITC WH

It features three digital inputs controlled by touchsensitive keys on the glass plate. Each single input can be programmed with all the functions available to the system. The keys have an LED to show the on/off state of their corresponding controlled output. To cut consumption to a minimum, the LEDs light up via a sensor, only when the user reaches out a hand to the device. Direct bus connection. Auxiliary power-supply 12÷24. Installation on standard 3-module rectangular box. White.

Dimensions: 120 x 80 mm

#### **TECHNICAL FEATURES**

	OH/6ITC BK - OH/6ITC WH	OH/3ITC BK - OH/3ITC WH
Power supply (V DC)	12-24	12-24
Consumption at 18 V (mA)	6÷25	6÷17
Inputs	6	3
Motion sensor	Yes	Yes
Dimensions (mm)	120 x 80	120 x 80
Plaque material	Glass	Glass
Operating temperature (°C)	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation

#### MODULE WITH FOUR CONTROLS ON WHITE GLASS PLATE



#### CODE: 67600540

#### **ID: OH/4ITC BK**

It features four digital inputs controlled by touch-sensitive keys on the glass plate. Each single input can be programmed with all the functions available to the system. The keys have an LED to show the on/off state of their corresponding controlled output. To cut consumption to a minimum, the LEDs light up via a sensor, only when the user reaches out a hand to the device. Direct bus connection. Auxiliary power-supply 12÷24. Installation on standard round box (60 mm diameter). Black.

Dimensions: 80 x 80 mm



#### CODE: 67600550

#### **ID: OH/4ITC WH**

It features four digital inputs controlled by touch-sensitive keys on the glass plate. Each single input can be programmed with all the functions available to the system. The keys have an LED to show the on/off state of their corresponding controlled output. To cut consumption to a minimum, the LEDs light up via a sensor, only when the user reaches out a hand to the device. Direct bus connection. Auxiliary power-supply 12÷24. Installation on standard round box (60 mm diameter). White.

Dimensions: 80 x 80 mm

#### MODULE WITH TWO CONTROLS ON BLACK GLASS PLATE



#### CODE: 67600560

#### ID: OH/2ITC BK

It features two digital inputs controlled by touch-sensitive keys on the glass plate. Each single input can be programmed with all the functions available to the system. The keys have an LED to show the on/off state of their corresponding controlled output. To cut consumption to a minimum, the LEDs light up via a sensor, only when the user reaches out a hand to the device. Direct bus connection. Auxiliary power-supply 12÷24. Installation on standard round box (60 mm diameter). Black.

Dimensions: 80 x 80 mm

#### MODULE WITH TWO CONTROLS ON WHITE GLASS PLATE



#### CODE: 67600570

#### ID: OH/2ITC WH

It features two digital inputs controlled by touch-sensitive keys on the glass plate. Each single input can be programmed with all the functions available to the system. The keys have an LED to show the on/off state of their corresponding controlled output. To cut consumption to a minimum, the LEDs light up via a sensor, only when the user reaches out a hand to the device. Direct bus connection. Auxiliary power-supply 12÷24. Installation on standard round box (60 mm diameter). White.

Dimensions: 80 x 80 mm

#### **TECHNICAL FEATURES**

	OH/4ITC BK - OH/4ITC WH	OH/2ITC BK - OH/2ITC WH
Power supply (V DC)	12-24	12-24
Consumption at 18 V (mA)	6÷20	6÷13
Inputs	4	2
Motion sensor	Yes	Yes
Dimensions (mm)	80 x 80	80 x 80
Plaque material	Glass	Glass
Operating temperature (°C)	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation

#### **BLACK GLASS PLATE FOR THREE MODULES**



#### CODE: 67900160

#### ID: PLV3M BK

Can be used with the BTicino Axolute series. Installation on standard 3-module rectangular box.

#### WHITE GLASS PLATE FOR THREE MODULES



#### CODE: 67900170 ID: PLV3M WH

## Can be used with the BTicino Axolute series. Installation on

Can be used with the Blicino Axolute series. Installation on standard 3-module rectangular box.

#### BLACK GLASS PLATE WITH TWO MODULES



#### CODE: 67900180

#### **ID: PLV2M BK**

Can be used with the BTicino Axolute series. Installation on standard round box (60 mm diameter).

#### WHITE GLASS PLATE WITH TWO MODULES



#### CODE: 67900190

#### ID: PLV2M WH

Can be used with the BTicino Axolute series. Installation on standard round box (60 mm diameter).

## **DIGITAL INPUT AND OUTPUT MODULES**

## OH/6I - OH/4I - OH/RP - OH/RI - OH/3RPI Modules

The inputs and output modules connect the home-automation system to the outside world. The inputs, which are typically connected to standard industry buttons, send control signals over the home-automation bus line to the output modules. The outputs receive signals from the input modules and, via relays with which they are fitted, activate their corresponding electrical loads. The input and output modules can be housed, as shown in the figure, on the bottom of standard industry recess-mounting boxes, in junction boxes and control panels, on DIN guides.



#### **OPERATING MODES**

The matching of the system's inputs and outputs is a generally very versatile thing when it comes to solving the more complex system solutions. During programming, each single output can be matched to up to eight different inputs; each single input can control the output in a different way, depending on the following operating modes:

#### **STEP-BY-STEP**

The output changes state. Each time the button that controls the input is pressed. For controlling the lighting points.

#### ON

The output changes to the ON state, when the button controlling the input that it is connected to is pushed, if the condition is OFF. Contrarily, the command is ignored.

#### OFF

The output switches to OFF, when the button controlling the input that it is connected to is pushed, if the condition is ON, Contrarily, the command is ignored.

#### **DIRECT (MAN PRESENT)**

The output follows the state of the input that controls it. Usable, for example, for controlling ringers or door bells.

#### **ENABLING**

It works just like the previous "Direct" mode, but the output only switches if the enabling signal is present. For controlling, for example, an outdoor lighting body that is enabled by a dusk switch.

#### **IMPULSE**

The output, once the button that is connected to it is pressed, is activated after a delay (R) for a set time (T). Both T and R are programmable between 1 second and 60 minutes.

#### **SWITCH**

Usable to connect the input, which controls the output, to a switch. The output changes state every time the state of the switch changes, that is, when it opens and closes.

Vice versa, an input can control, in different ways depending on the described functionalities, an unlimited amount of outputs. Two commands can also be matched to each input of the OH/6I, OH/4I and OH/3RPI modules. More precisely, by quickly pressing for more than 1 second, the first command associated to it is activated. Whereas by keeping pressed (for a set time of between 1 and 60 seconds, the second command is activated. Both commands can be used to control outputs and to make various activations, or to launch any programmed scenarios.

On modules that have inputs and outputs, the inputs can control the outputs of the module to which they belong, or the outputs of any other modules connected to the system.

On modules that have inputs and outputs, the inputs can control the outputs of the module to which they belong, or the outputs of any other modules connected to the system.



#### OH/4I

It features, besides four digital inputs, four 1.5 to 3.5 V DC and 2 mA maximum outputs for connecting alert LEDs. The outputs can be paired, when programming, to system outputs. This lets you read, at the control point, the state of the controlled load.



#### OH/RP

It features one relay output with an NO contact for controlling an electric load. The module's outputs can be expanded to three by using the OH/2RP two-output module. The OH/RP cannot be used without OH/RP.



## **OH/RI** It features three digital inputs, and one relay output with NO contact for controlling an electrical load.



#### OH/3RPI

It features three digital inputs and three relay outputs with NO contact for controlling electrical loads.

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#### **MODULE WITH SIX DIGITAL INPUTS**



#### CODE: 67600201

#### ID: OH/6I

It features six digital inputs for connecting control devices, such as buttons or detector output contacts. The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 56 x 53.5 x 18 mm

#### MODULE WITH FOUR DIGITAL INPUTS AND FOUR OUTPUTS FOR ALERT LEDS



#### CODE: 67600011

#### ID: OH/4I

It features four digital inputs for connecting control devices, such as buttons or detector output contacts, plus four O.C. outputs for connecting alert LEDS, to pair up with a system's outputs, to have visual feedback on the state of the controlled load. The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

*Dimensions: 56 x 53.5 x 18 mm* 

#### **TECHNICAL FEATURES**

	OH/6I	OH/4I
Power supply (V DC)	20	20
Current draw at 20 V (mA)	4	4
Inputs	6	4
Type of input contact	NO, NC	NO, NC
Length on input cables (m)	Max 20	-
Outputs	-	4
Type of output	-	Low voltage
Output current (mA)	-	2
Dimensions (mm)	56 x 53.5 x 18	56 x 53.5 x 18
Container material	ABS	ABS
Operating temperature (°C)	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation

#### MODULE WITH ONE DIGITAL OUTPUT

#### EXPANSION MODULE WITH TWO DIGITAL OUTPUTS



#### CODE: 67600401

#### ID: OH/RP

It features one relay output with an NO contact for controlling an electric load. The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 56 x 53.5 x 18 mm



#### CODE: 67600501

#### ID: OH/2RP

It features two relay output with an NO contact for controlling electric loads. It is for expanding - to three - the outputs of the OH/RP module to which it is always paired with.

The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 56 x 53.5 x 18 mm

#### MODULE WITH ONE DIGITAL OUTPUT AND THREE DIGITAL INPUTS



#### MODULE WITH THREE DIGITAL OUTPUTS AND THREE DIGITAL INPUTS



#### CODE: 67600301

#### ID: OH/RI

It features one relay output with an NO contact for controlling an electric load and three digital inputs for connecting control devices, such as buttons or detector output contacts.

The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

#### Dimensions: 56 x 53.5 x 18 mm

#### CODE: 67600701

#### ID: OH/3RPI

It features three relay outputs with an NO contact for controlling electric loads and three digital inputs for connecting control devices, such as buttons or detector output contacts.

The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 85.5 x 60 x 21 mm

#### **TECHNICAL FEATURES**

	OH/RP	OH/2RP	OH/RI	OH/3RPI	
Power supply (V DC)	20	20	20	20	
Current draw at 20 V (mA)	4	4	4	4	
Inputs	-	-	3	3	
Type of input contact	-	-	NO, NC	NO, NC	
Length on input cables (m)	-	-	Max 20	Max 20	
Outputs	1	2	1	3	
Type of output	NO contact	NO contact	NO contact	NO contact	
Resistive load that can be controlled at 230 VAC (A)	10	10	5	10	
Inductive load ( $\cos \varphi 0.5$ ) controllable at 230 V AC (A)	2	2	2	2	
Dimensions (mm)	56 x 53.5 x 18	56 x 53.5 x 18	56 x 53.5 x 18	85.5 x 60 x 21	
Container material	ABS	ABS	ABS	ABS	
Operating temperature (°C)	0 - 35	0 - 35	0 - 35	0 - 35	
Relative operating humidity (%)	93 No condensation	93 No condensation	93 No condensation	93 No condensation	

## OH/R.01 and OH/RI4416 modules

The OH/R.01 and OH/RI4416 control-panel installation modules have four C-NO-NC exchange contact relay outputs for controlling electric loads (ON/OFF electric valves, lighting bodies, etc.) and four digital inputs for connecting control devices (buttons or detector output contacts). Again, the inputs can control the outputs of the modules they belong to or the outputs of other modules fitted onto the system.

The OH/R.01 contacts are for controlling a resistive load of 5A (maximum 2A per inductive load). Whereas the OH/RI4416 module is for controlling 16A loads (maximum 16A per inductive load).

The front of the OH/RI4416 module also features four switch selectors for manually activating the outputs, even when the module is disconnected from the power supply. This enables direct control of the load connected to each single output in case of malfunctions or emergencies, or to check the proper connection of the loads to the corresponding outputs. (maximum 2A per inductive load). Whereas the OH/RI4416 module is for controlling 16A loads (maximum 16A per inductive load).

The front of the OH/RI4416 module also features four switch selectors for manually activating the outputs, even when the module is disconnected from the power supply. This enables direct control of the load connected to each single output in case of malfunctions or emergencies, or to check the proper connection of the loads to the corresponding outputs. outputs, even when the module is disconnected from the power supply. This enables direct control of the loads to the corresponding outputs. each single output in case of malfunctions or emergencies, or to check the proper connection of the loads to the loads to the loads to the corresponding outputs.

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## **EXAMPLE OF INSTALLATION**

# MODULE WITH FOUR 5A DIGITAL OUTPUTS AND FOUR DIGITAL INPUTS



#### CODE: 67600111

#### ID: OH/R.01

It features four relay outputs with an exchanger C-NO-NC contact for controlling electric loads and four digital inputs for connecting control devices, such as buttons or detector output contacts. The container can be installed in a switchboard on a DIN rail.

Dimensions: 6 DIN modules

#### MODULE WITH FOUR 16A DIGITAL OUTPUTS WITH MANUAL REARMING AND FOUR DIGITAL INPUTS



#### CODE: 67600041

#### ID: OH/RI4416

It features four relay outputs with a C-NO-NC contact for controlling electric loads and four digital inputs for connecting control devices, such as buttons or detector output contacts. The outputs can be manually activated via the four selectors fitted on the front panel. The container can be installed in a switchboard on a DIN rail.

Dimensions: 6 DIN modules

#### **TECHNICAL FEATURES**

	OH/R.01	OH/RI4416
Power supply (V DC)	20	20
Current draw at 20 V (mA)	5	8
Inputs	4	4
Type of input contact	NO, NC	NO, NC
Length on input cables (m)	20	20
Outputs	4	4
Type of output	C-NO-NC contact	C-NO-NC contact
Resistive load that can be controlled at 230 VAC (A)	5	16
Inductive load ( $\cos \phi 0.5$ ) controllable at 230 V AC (A)	2	5
Dimensions (DIN)	6	6
Container material	ABS	ABS
Operating temperature (°C)	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation

## **OH/IR - OH/IRTX01 modules**

The OH/IR module connects an IR receiver that talks to the OH/IRTX01 remote control from which it receives commands. It also features 2 digital inputs for connecting control devices (buttons or detector output buttons). The module can be installed as shown in the figure on the back of standard industry recess-mounting boxes, in junction boxes, or on a DIN rail. The IR receiver can be installed onto a standard industry series end-cap (after drilling the hole) or onto an equivalent cap.

The 12 buttons on the OH/IRTX01 remote control can be programmed as system inputs.

## INSTALLATION MODULES


#### **IR RECEIVER MODULE WITH TWO DIGITAL INPUTS**

#### IR REMOTE CONTROL FOR MANAGING12 CONTROLS



# 

#### CODE: 67900061

#### ID: OH/IRTX01

It features twelve keys, which can be programmed as system inputs for sending as many commands to the home-automation system.

Dimensions: 29 x 85 x 7 mm

#### CODE: 67600221

#### ID: OH/IR

It features an IR receiver for talking to the OH/IRTX10 remote control fro which it gets its commands, plus two digital inputs for connecting control devices, such as buttons or detector output contacts.

The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 56 x 53.5 x 18 mm

	OH/IR	OH/IRTX01
Power supply (V DC)	20	Battery 3 V CR1220 (one)
Current draw at 20 V (mA)	-	-
Inputs	2	12
Type of input contact	NO, NC	-
Length on input cables (m)	20	-
Dimensions (mm)	56 x 53.5 x 18	29 x 85 x 7
Container material	ABS	ABS
Operating temperature (°C)	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation

### **MODULES FOR CONTROLLING OPERATORS**

### **OH/MA Module**

This module is for controlling motors on shutters, awnings and venetian blinds. It features 3 relay outputs for managing a motor's turning direction, plus 3 inputs for locally controlling the motor-powered device that directly activate the outputs (the inputs, in this case, cannot command any other system outputs. The input commands affect the outputs as follows:

#### **TIMER CONTROL**

If the command lasts less than one second, the associated output shall remain active for the Ton time (the opening and closing time).

#### **MAN-PRESENT COMMAND**

If the command lasts for more than one second, the output shall follow the input's state ad shall be activated for the duration of said input's activation.

From buttons connected to the system's inputs you can control the outputs in the following way:

#### **PARTIAL OPENING (EXPRESSED IN%)**

When the command is activated, the associated output enables the partial opening of the shutter, positioning at preset point, for example: if the opening is set to 30%, when the button is activated, first the shutter completely closes and then opens to 30%. If the closing is set, first the shutter completely opens and then closes to the set percentage value.

#### **INSTALLATION EXAMPLE**



Contrarily, if set up to control powered venetian blinds, the input commands act on the outputs according to the following operating modes:

#### **SLAT ROTATION CONTROL**

If the command lasts less than two seconds, the associated output shall remain active for the slats' set rotation time.

#### **TIMER CONTROL**

If the command lasts for more than two seconds, the associated output shall stay active for the duration of the Ton time (opening ad closing time).

### **INSTALLATION EXAMPLE**



# MODULE WITH ONE CHANNEL FOR CONTROLLING POWER SHUTTERS, AWNINGS AND VENETIAN BLINDS.



#### CODE: 67600601

#### ID CODE: OH/MA

It features 3 relay outputs for controlling motorpowered devices and 3 inputs for locally controlling the corresponding outputs (Up, Down, Stop). The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 56 x 53.5 x 18 mm

	OH/MA
Power supply (V DC)	20
Current draw at 20 V (mA)	5
Inputs	4
Type of input contact	NO, NC
Length on input cables (m)	20
Outputs	4
Type of output	NO contact
Resistive load that can be controlled at 230 VAC (A)	10
Inductive load ( $\cos \phi 0.5$ ) controllable at 230 V AC (A)	2
Dimensions (mm)	85.5 x 60 x 21
Container material	ABS
Operating temperature (°C)	0 - 35
Relative operating humidity (%)	93 No condensation

### **OH/CRP** module

It is for interfacing the home-automation bus line with the CRP RS485 bus of the latest generation CAME-line operators. Thanks to this type of integration the home-automaton devices can be controlled via the TS7, TS10 touch screen terminals or from handheld devices connected to the ERI/DOMO system server.

You can connect up to 16 OH/CRP modules. Each module lets you control 8 operators.

### INSTALLATION EXAMPLE



#### CODE: 67100180

#### ID: OH/CRP

It is for controlling 8 CAME automation systems, for example, Sipario automatic doors or Fast40 gate operators, by connecting the home-automation bus to the CAME CRP operator bus. The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 85.5 x 60 x 21 mm

	OH/CRP	
Power supply (V DC)	20	
Current draw at 20 V (mA)	25	
Length of RS485 cable (m)	1,000 (with UTP CAT5 AWG24 cable)	
Dimensions (mm)	85.5 x 60 x 21	
Container material	ABS	
Operating temperature (°C)	0 - 35	
Relative operating humidity (%)	93 No condensation	

### ANALOG INPUT AND OUTPUT MODULES

### **OH/AI4 module**

It features 4 analog impulse-counting inputs. The analog inputs are sending a digital signal over the bus line proportioned to an analog-type size. This signal can be of the 0 - 10 V o 4 - 20 mA type. In this way, the output signal coming out of a generic sensor (e.g.: brightness, temperature, level, humidity or anemometer sensors for detecting wind velocity) that has a standard 0 - 10 V o 4 - 20 mA output can be connected to the analog module's input which will in turn send it over the home-automation bus line so that the system may process it.

The analog input module must be programmed to send the input size value, over the bus line, in the following modes:

#### **UPON CHANGING**

The input size value is sent after a change of the signal that is greater than the programmed value, (e.g.: a 10% variation. The module sends a signal over the bus line when the input undergoes a 10% variation compared to the last measured signal).

#### **UPON TIME**

The value is sent at regular minute-intervals that correspond to the value assigned to the "Cyclical Sending Time" parameter.

When programming you can also decide if two conditions, that is, Upon Changing or Upon time, will be combined in AND mode (both conditions must be met) or in OR mode (at least one of the two conditions must be met).

#### **UPON REQUEST**

The input-size value is sent when either a PC or touch screen connected to the system bus, send a request.

#### **UPON EXCEEDING THE THRESHOLD**

The input-size value is sent when set limits are exceeded (max. 8). Each threshold generates and event to which you can match the activation of analog or digital outputs. You can distinguish between exceeding upward and exceeding downward.

Concerning signals acquired by impulse-counting inputs, the same considerations apply as those of the analog inputs, taking into account that the input-size value, inbound from specific devices, is transmitted over the bus line once a preset number of impulses is reached.

### INSTALLATION EXAMPLE



#### **MODULE WITH 4 ANALOGUE INPUTS**



#### CODE: 67600061

#### ID: OH/AI4

It features four 0 - 10 V, analog inputs ; 4 - 20 mA and 2 impulse-counter inputs (0 - 256 Khz) for measuring the signals coming from devices with analog outputs (anemometers, light sensors, humidity detectors, and so on). The casing lets you install it from the control panel on DIN guides or recess-mount it on the bottom of the box.

Dimensions: 85.5 x 60 x 21 mm

	OH/AI4	
Power supply (V DC)	20	
Current draw at 20 V (mA)	7	
Analogue inputs	4	
Pulse counter inputs	2	
Length on input cables (m)	Max 20	
Dimensions	85.5 x 60 x 21	
Container material	ABS	
Operating temperature (°C)	0 - 35	
Relative operating humidity (%)	93 No condensation	

### OH/A01010 module

It features one 0 - 10 V-type analog relay output with NO contact for powering on and off the corresponding connected electrical load, plus one input for connecting control devices like buttons. The analog output provides a standard 0 - 10 V DC signal which represents the analog size processed by the home-automation system. It can be connected to actuators with standard 0 - 10 V inputs, such as proportional electric valves, generic dimmers and fan coil convectors and can be programmed to operate according to the following modes:

#### **DIMMER (OR MANUAL)**

This application is used for manually adjusting the brightness of a lighting element. The output is matched to a digital input which either on the module itself or on another of the system's volumes, and connected to a button. The output current, adjusted as shown below, through a 0 - 10 V-input dimmer, lets you vary the brightness of the connected lamp. The type of lamp you can use depends on the type dimmer used.

- By pressing the button for less than 1 second, the output is controlled in step-by-step mode, that is, it switches each time the button is pressed, between the load deactivation value and last memorized value.
- By pressing the button for more than 1 second but for less than 2 seconds, the output sets itself to the highest recorded value.
- By pressing the button for more than 2 seconds, the output current is varied to allow you to select the value you want.
- After releasing the button that value is maintained.

#### LINEAR

The 0÷10 V output linearly - by applying a scale - replicates the performance of an analog input of the system.

#### **STEP**

The output takes on preset values, ones associated to the system's analog-input thresholds or to the activation of digital inputs.

#### **CHASE (OR AUTOMATIC OPERATION)**

The outgoing current value depends on the difference between a values set whether on programming software, on a screen or on an analog input, and defined as set point and a measured physical size value that is present on one of the system's specific analog-output.

### **EXAMPLES OF INSTALLATION**





The brightness of the lamp is adjusted manually by pressing the button.



#### APPLYING THE CHASE (or automatic function)

The lamp's brightness value is a function of the difference between the desired value, that is, the set point, and the value measured by the brightness sensor.

#### MODULE WITH ONE 0 - 10 V ANALOG OUTPUT AND WITH ONE DIGITAL INPUT AND OUTPUT



#### CODE: 67600802

#### ID: OH/AO1010

It features one 0 - 10 V analog input, one relay output with NO contact for powering on and off the corresponding connected electrical load, plus one input for connecting control devices, such as buttons. The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 85.5 x 60 x 21 mm

	OH/AO1010	
Power supply (V DC)	20	
Current draw at 20 V (mA)	10	
Digital inputs	1	
Type of input contact	NO	
Length on input cables (m)	Max 20	
Analog outputs	1	
Digital outputs	1	
Types of digital outputs	NO contact	
Resistive load that can be controlled at 230 VAC (A)	10	
Inductive load ( $\cos \phi 0.5$ ) controllable at 230 V AC (A)	2	
Dimensions (mm)	85.5 x 60 x 21	
Container material	ABS	
Operating temperature (°C)	0 - 35	
Relative operating humidity (%)	93 No condensation	

### OH/A04010 module

It features four 0 - 10 V-type analog outputs, and four relay outputs with NO contact for powering on and off the corresponding connected electrical load, plus one input for connecting control devices like buttons. The inputs can control the outputs of the module to which they belong or the outputs of any other modules connected to the system. The relay outputs are 'local' and so are not available for other system functions. The operation of the outputs and inputs and the corresponding functioning logics are those described for the OH/AO1010 module.

### INSTALLATION EXAMPLE



### OH/DI300 module

It features one 3W to 300W dimmer channel for controlling the brightness of lighting elements, plus one input for connecting control devices like buttons. The operation of the digital input and output and of the corresponding functioning logics are the same as those of the OH/AO1010 module. In this case the outputs are directly connectable to the controllable load.

It is for controlling the following electrical loads:

incandescent lamps, 230 V halogen lamps, 12 V halogen lamps with ferromagnetic transformer, 12 V halogen lamps with electronic transformer, compact or energy saving fluorescent lamps.



### INSTALLATION EXAMPLE

#### MODULE WITH 0 - 10 V ANALOG OUTPUTS WITH FOUR DIGITAL INPUTS AND OUTPUTS



#### CODE: 67600031

#### ID: OH/AO4010

It features four 0 - 10 V analog inputs, one relay output with NO contact for powering on and off the corresponding connected electrical load, plus four inputs for connecting control devices, such as buttons.

The container can be installed in a switchboard on a DIN rail.

Dimensions: 6 DIN modules

#### DIMMER MODULE WITH ONE CHANNEL FOR ONE DIGITAL INPUT



#### CODE: 67600740

#### ID: OH/DI300

It features a 3W to 300W one-channel dimmer for controlling lighting and one input for connecting control devices such as buttons. The container can be installed in a switchboard on a DIN

rail.

Dimensions: 2 DIN modules

	OH/AO4010	OH/DI300
Power supply (V DC)	230	230
Current draw at 20 V (mA)	2	2
Digital inputs	4	1
Type of input contact	NO, NC	NO, NC
Length on input cables (m)	Max 20	Max 20
Analogue inputs	-	2
Digital outputs	4	-
Types of digital outputs	NO contact	-
Resistive load that can be controlled at 230 VAC (A)	10	-
Inductive load ( $\cos \varphi$ 0.5) controllable at 230 V AC (A)	2	-
Analog outputs	4	-
Dimmer outputs	-	1
Maximum power for controlling 230 V halogen lamps or (VA) incandescent lamps	-	300
Max power for controlling 12 V halogen lamps with (VA)     ferromagnetic transformer	-	300
Max power for controlling 12 V halogen lamps with (VA) CA or CC (VA electronic transformer	-	300
Max power for controlling 230 V compact fluorescent lamps or (VA) energy saving lamps	-	150
• 230 V (VA) LED lamps	-	150
Low voltage LED with Driver	-	150
Dimensions (DIN)	6 DIN	2 DIN
Container material	ABS	ABS
Operating temperature (°C)	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation





CAME 🕇

LIGHTING

## NEW ATMOSPHERES AND EMOTIONS OF LIGHTS AND COLORS



Create a pleasant room to live in, at any time of the day, while meeting everyone's needs. Effective lighting has always played a key role in meeting these objectives.

Even in this case, thanks to home-automation, traditional lighting is replaced by new, intelligent lighting management systems, where color plays the leading role. Unheard of scenarios and surreal atmospheres are now within our reach to customize living spaces. The this case, thanks to home-automation, traditional lighting is replaced by new, intelligent lighting management systems, where color plays the leading role. Unheard of scenarios and surreal atmospheres are now within our reach to customize our rooms. The **CAME DOMOTIC 3.0** home-automation system is for managing the TS7 and TS10 touch-screen terminals and RGB lamps. These, starting from the basic red, green and blue, recreate any hue and can be adjusted in brightness. This lets you completely customize your rooms with a simple gesture or, with automatic mode, by programming the time intervals.

### **CONTROL MODULES FOR DALI AND DMX SYSTEMS**

### **OH/DALI DMX module**

The OH/DALI DMX module is for interfacing the CAME home-automation bus line with the DALI and DMX bus lines and to control the lighting bodies connected to them. It features two distinct outputs, one for connecting the DALI bus line and one for connecting the DMX bus line, and it enables you to send the following control signals to the connected devices:

#### **DALI SYSTEM**

It's an ON/OFF type control and brightness adjusting of 64 lights (16 groups) connected over standard DALI bus line which can be identified by their corresponding address. The adjusting is done via digital inputs which have been specifically programmed, or, directly on the touch screen terminals. Up to 16 OH/DALI DMX modules can be connected to control 1,024 devices (256 groups).

#### **DMX SYSTEM**

It is an ON/OFF type control and light brightness adjuster for RGB spot lights connected over standard DMX-512 standard bus line. It is for controlling 512 DMX channels, which can be identified via corresponding address, that is, an three-color RGB spot light uses three channels; one per color. By mixing the three, RGB (Red Green Blue) basic colors, you can obtain various color scenarios. These are adjusted via specifically programmed digital inputs or directly on touch-screen terminals. You can connect up to 16 OH/DALI DMX modules.

The module does not allow simultaneous management of the two DALI and DMX bus lines.



## DMX SYSTEM INSTALLATION EXAMPLE

**DALI SYSTEM INSTALLATION EXAMPLE** 



#### CONTROL MODULE FOR DALI AND DMX SYSTEMS



#### CODE: 67100170

#### ID: OH/DALI DMX

Module for controlling DALI and DMX lighting. It features two outputs for connecting the corresponding DALI and DMX buses, and enables the sending, to the corresponding connected devices, of control signals from the CAME home-automation system. The container can be installed in a switchboard on a DIN rail.

Dimensions: 2 DIN modules

NOTE: this chapter shows the devices for controlling DALI and DMX lights. For controlling lighting in simple ON/OFF mode, or for controlling the brightness of standard lights, please refer to the digital and analog input and output modules, described in the Operator chapter.

	OH/DALI DMX	
Power supply (V DC)	20	
Current draw at 20 V (mA)	27	
Controllable devices	64 lamps and 16 DALI groups - 512 DMX channels	
Dimensions (DIN)	2	
Container material	ABS	
Operating temperature (°C)	0 - 35	
Relative operating humidity (%)	93 No condensation	



### **TEMPERATURE CONTROL**

## THE PERFECT CLIMATE IN EVERY ROOM



Traditional temperature management systems that use single thermostats or chrono-thermostats are often unsuitable to manage the temperature in homes. Often, circumstances require more. Like in multi-floor or even large homes, that need programming of different temperatures in each of the rooms at different times of day. This requires an evolved temperature management system that can break up the home in temperature zones and make precise adjustments for each zone.

This has brought about the new temperature-management systems, where special sensors help manage the different temperatures in the various zones around the home.

The touch-screen terminals of the **CAME DOMOTIC 3.0** homeautomation system have a cutting-edge, built-in function, for controlling different temperature zones through programs that are fully customizable by users. So, from one point, you can manage the temperature of an entire home.

### **INDOOR SENSORS AND THERMOSTATS**

#### ZONE THERMOSTAT FOR DIRECTLY CONNECTING TO THE HOME-AUTOMATION BUS



#### CODE: 67200081

#### ID: TA/P1

For controlling the temperature in the zone where it is installed. It features an auxiliary input for connecting a window-open contact, which blocks the control if the window is opened, or for connecting the OH/STI remote outdoor sensor or even a PT1000 sensor. It comes with cladding suitable for installing with standard industry plates into 503-type boxes and with three interchangeable white, anthrax-gray and silver covers included in the box.

Dimensions: 75 x 55 x 50 mm

#### INDOOR TEMPERATURE AND HUMIDITY SENSOR WITH DIRECT CONNECTION TO THE HOME-AUTOMATION BUS

11111			
CAME			
11111			

#### CODE: 67400021

#### ID: OH/SRI

It is for reading the temperature and humidity in the zone where it is installed. It features an auxiliary input for connecting a window-open contact, which blocks the control if the window is opened, or for connecting the OH/ STI remote outdoor sensor or even a PT1000 sensor. Wall mounting.

Dimensions: 80 x 120 x 25 mm

#### NTC 10K BETA 3977-TYPE INDOOR TEMPERATURE SENSOR



#### CODE: 67600121

#### ID: OH/STI

It is for controlling the temperature in the zone where it is installed. To employ paired with the OH/MT2 module, the OH/FANEVO module, the OH/SRI sensor, or a remote outdoor sensor of the 4,3" TH/PLUS touch-screen terminal and of the TA/P1 thermostat. Cable length 1.5 m.

Dimensions: 88 x 88 x 52 mm

	TA/P1	OH/SRI	OH/STI
Power supply (V DC)	20	20	=
Current draw at 20 V (mA)	8	5	-
Measuring range (°C)	0 ÷ +40	0 ÷ +40	-10 ÷ + 50
Temperature reading precision (°C)	0.3	0.3	+/- 1%
Measurable humidity (% UR)	-	10÷90	-
Humidity reading precision (with RH < 70%)	-	+/- 4%	-
Input for external sensor	Yes	Yes	-
Maximum length, in meters, of the outdoor sensor cables	2	2	-
Maximum length, in meters, of the cables connecting the OH/MT2	-	-	20
Dimensions (mm)	75 x 55 x 50	80 x 120 x 25	Length 1,500 (ø 6)
Container material	-	ABS	-
Operating temperature (°C)	0 ÷ +40	-10 ÷ + 50	-10 ÷ + 50
Relative operating humidity (%)	93 No condensation	93 No condensation	93 No condensation

### **OUTDOOR SENSORS AND SENSOR MODULES**

# OUTDOOR TEMPERATURE AND HUMIDITY SENSOR WITH DIRECT CONNECTION TO THE HOME-AUTOMATION BUS



#### CODE: 67400011

#### ID: OH/SRE

It is for measuring the temperature, humidity and atmospheric pressure. It features an auxiliary inputs for connecting the OH/STE remote outdoor sensor. Wall mounting.

Dimensions: 80 x 80 x 25 mm



NTC 10K BETA 3977-TYPE OUTDOOR TEMPERATURE SENSOR

#### CODE: 67600131

#### ID: OH/STE

It is for measuring the outdoor temperature. Wall-mounted. To use paired with the  $\mbox{OH}/\mbox{MT2}$  module.

Dimensions: 65 x 144.5 x 38 mm

MODULE WITH TWO INPUTS FOR NTC 10K BETA 9937 OR PT1000 TEMPERATURE SENSORS AND WITH TWO, 4 - 20 MA ANALOG INPUTS FOR HUMIDITY SENSORS



#### CODE: 67600071

#### ID: OH/MT2

It allows interfacing between the home automation bus and the OH/STI and OH/STE sensors to perform readings and temperature checks. The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 85.5 x 60 x 21 mm

TECHNICAL FEATURES			
	OH/SRE	OH/STE	OH/MT2
Power supply (V DC)	20	-	20
Current draw at 20 V (mA)	5	-	7
Measuring range (°C)	-30 ÷ +60	-40 ÷ +125	-
Temperature reading precision (°C)	0.3	+/- 1%	-
Measurable humidity (% UR)	10 ÷ 90	-	-
Humidity reading precision (with UR < 70%)	+/- 4%	-	-
Input for external sensor	Yes	-	-
Inputs for NTC 10K beta 9937-type sensors	-	-	2
Analog inputs 4 - 20	-	-	2
Maximum length in meters of the outdoor sensor cables	2	-	-
Maximum length, in meters, of the cables connecting the OH/MT2	-	20	-
Dimensions (mm)	80 x 80 x 52	65 x 144.5 x 38	85.5 x 60 x 21
Container material	ABS	ABS	ABS
Operating temperature (°C)	-20 ÷ +50	-40 ÷ +125	0 to +35
Relative operating humidity (%)	93 No condensation	93 No condensation	93 No condensation

### **MANAGE TEMPERATURE ZONES WITH THE TS4.3 TOUCH SCREEN**

The ample and performing range of temperature management devices, make for countless system solutions: from small-medium installations, where only a few temperature zones are required, to very large systems. The TS4.3 touch-screen terminal lets you manage and control eight temperature zones: one is controlled directly by the terminal - as it is fitted with an on-board temperature sensor - whereas the others are controlled via TA/P1 zone thermostats or OH/SRI indoor sensors. You can also connect up OH/SRE outdoor sensors to the exterior of a building to monitor the temperature, humidity and atmospheric pressure. All the devices are connected to the terminal via the home-automation bus line.

Each zone thermostat measures the temperature in the room where it is installed and sends the information to the terminal, which, depending on the temperature program the user has set, sends out control signals to the input modules for activating the zone's electric valves. For each temperature zone, besides the manual control mode, you can set up customized programs for each day of the week.

The TS4.3 touch screen terminal, the TA/P1 thermostats and the OH/SRI sensors all feature an input to which you can connect magnetic contacts for windows that block the heating or the cooling of a zone if that window is opened. Alternatively, you can connect the OH/STI remote outdoor-sensor or even a PT1000 sensor to the same input, which will then replace those fitted onboard the devices.

The system is extremely simple to use: a few commands are enough to set up temperature programs and manage the various temperature zones. Thermostat measures the temperature in the room where it is installed and sends the information to the terminal, which, depending on which temperature program the user has set, sends out control signals to the input modules for activating the zone's electric valves. For each temperature zone, besides the manual control mode, you can set up customized programs for each day of the week.

The TS4.3 touch screen terminal, the TA/P1 thermostats and the OH/SRI sensors all feature an input to which you can connect magnetic contacts for windows that block the heating or the cooling of a zone if that window is opened. Alternatively, you can connect the OH/STI remote outdoor-sensor or even a PT1000 sensor to the same input, which will then replace those fitted onboard the devices.

The system is extremely simple to use: a few commands are enough to set up temperature programs and manage the various temperature zones. TS4.3 touch screen terminal, the TA/P1 thermostats and the OH/SRI sensors all feature an input to which you can connect magnetic contacts for windows that block the heating or the cooling of a zone if that window is opened. Alternatively, you can connect the OH/STI remote outdoor-sensor or even a PT1000 sensor to the same input, which will then replace those fitted on-board the devices.

The system is extremely simple to use: a few commands are enough to set up temperature programs and manage the various temperature zones.

### **INSTALLATION EXAMPLE**



The TA/P1 thermostat is for connecting a magnetic contact to windows to turn off the heating or cooling in a zone when a window is opened. Alternatively, you can connect the OH/STI remote outdoor-sensor or even a PT1000 sensor to the same input, which will then replace the indoor one.

### **INSTALLATION EXAMPLE**



### **GRAPHIC INTERFACE**



Temperature control

### **MANAGE TEMPERATURE ZONES WITH THE TS7 AND TS10 TOUCH SCREENS**

The ETI/DOMO system server features a temperature control program. It is very useful when you need to control a large number of temperature zones while using a cutting-edge system that integrates into the rest of the system.

By connecting either a touch-screen terminal or a handheld device to the ETI/DOMO, the system lets you manage 20 temperature zones - each controlled by a TA/P1 thermostat or a sensor. This is true for every section of a system that is controlled by an OH/ GW gateway or by another ETI/DOMO system server paired with the OH/SER interface. Up to four sections of a system can be set up for a total of 80 temperature zones. This is true when using the ETI/DOMO configuration. Whereas the OH/SER configuration allows control of up to 20 temperature zones.

The ETI/DOMO configuration. Whereas the OH/SER configuration allows control of up to 20 temperature zones.

Each zone thermostat measures the temperature in the room where it is installed and sends the information to the terminal, which, depending on which temperature program the user has set, sends out control signals to the input modules for activating the zone's electric valves.

You can select one of the following functions for each zone:

#### MANUAL

The user can manage the zone by manually controlling the thermostat.

#### AUTOMATIC

Users can set up temperature profiles for each weekday and temperature levels every quarter-of-an-hour. There are three temperature levels that users can set up; T1-T2-T3: plus two more that the system calculates as averages of T1–T2 and T2-T3.

#### ALL PURPOSE PROGRAMME

Temperature profiles for special situations, like if you are away for an occasional trip. Users can activate this at any time.

the TA/P1 thermostats and the OH/SRI sensors all feature an input to which you can connect magnetic contacts for windows that block the heating or the cooling of a zone if that window is opened. Alternatively, you can connect the OH/STI remote outdoor-sensor or even a PT1000 sensor to the same input, which will then replace those fitted on-board the devices.

**GRAPHIC INTERFACE** 





Also fan coil units can be controlled via the corresponding OH/FAN and OH/FANEVO modules.



The thermostat lets you locally adjust  $a + / - 2^{\circ}$  C temperature difference that is set up while programming, compared to that appearing on the terminal screen. The manual programming can be limited for a preset period.

### FAN COIL CONTROL MODULES

### **OH/FAN module**

It is for managing the on-board relay-based three-speed fan-coil unit. It features three digital inputs, to which you can connect buttons, (or one three-way selector), for locally controlling the three speeds - the inputs, in this case, cannot control the other outputs of the system. There is also a fourth input for connecting magnetic contacts for windows, to turn off the heating or cooling in a room when a window there is opened.



### **OH/FANEVO** module

For managing three-speed fan coil units, via three on-board relay outputs, and it has extra functions compared to the OH/FAN module. In fact, it has two 0 - 10 V analog outputs for connecting the delivery, proportional-type electric-valves, plus two relay outputs which are alternative to the analog outputs, for controlling the delivery ON/OFF type electric valves. This lets you control the water flow as well as the fan coil speed.

There are also two digital inputs which to connect buttons to: one for the manual cyclical selection of the three speeds and the other for selecting the automatic mode. The automatic mode allows to connect magnetic contacts for windows in order to make the heating or cooling systems turn off in a specific zone when a window there is opened. It features one input for connecting the OH/STI sensor for properly controlling the electric delivery valve (if the sensor detects cold water in the delivery tube, it keeps the valve closed if heating is requested; at the same time, if it detects hot water, it keeps the outflow valve shut in case cooling is requested).

The OH/FANEVO is for controlling two-tube (both hot and cold) fan coils or four-tube fan coils that have separate hot and cold circuits.





#### CODE: 67600021

#### ID: OH/FAN

It features three relay outputs for controlling three-speed fan-coil units and has three digital inputs for locally controlling the three outputs. It features an auxiliary input for connecting a window-open contact, which blocks the control if the window is opened.

The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

#### Dimensions: 85.5 x 60 x 21 mm

MODULE FOR CONTROLLING FAN COILS THAT FEATURE MORE EVOLVED FUNCTIONS

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#### CODE: 67600051

#### **ID: OH/FANEVO**

It features three relay outputs for controlling a fan coil's three speeds, plus two 0 - 10 V, analog outputs for controlling outflow electric valves of the proportional type, and two relay outputs for controlling outflow electric valves of the on/off type, and two digital inputs and one analog input for connecting an OH/STI sensor. It is for fully managing a fan-coil unit by controlling both the fan speed and the water intake to the fan.

The container can be installed in a switchboard on a DIN rail.

Dimensions: 6 DIN modules

	OH/FAN	OH/FANEVO
Power supply (V DC)	20	20
Current draw at 20 V (mA)	4	8
Digital inputs	3	2
Type of input contact	NO, NC	NO, NC
Length on input cables (m)	20	20
Analogue inputs	-	1
Digital outputs	3	5
Types of digital outputs	NO	NO contact (fan control) C-NO-NC contact (valve control)
Controllable resistive load at 230 V AC (A)	10	10 fan control 5 valve control
Inductive load ( $\cos \phi$ 0.5) controllable at 230 V AC (A)	2	2 fan control 2 valve control
Analog outputs	-	2
Dimensions (mm or DIN)	85.5 x 60 x 21	6
Container material	ABS	ABS
Operating temperature (°C)	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation



### POWER MANAGEMENT

## MORE ATTENTION TO CONSUMPTION, MEANS LESS WASTED ENERGY



Modern homes have so many electrical utilities that consumption can easily run out of control. Power outages tend to increase as our demand for power consumption increases, but our utility contracts are restrictive. It is not uncommon to run 2 electric appliances and have the lights go out the general magnetothermic switch box is often outdoors. You can avoid all this by installing the energy management module of the out due to an overload is a common nuisance; the general magnetothermic switch box is often outdoors. You can avoid all this by installing the energy management module of the CAME **DOMOTIC 3.0** home-automation system, which when a surcharge is required, disconnects the unneeded loads, and reconnects them later. The system also clearly displays - the current and historical consumption, plus other managed electrical loads, along with water and gas - on the TS7 and TS10 touch-screen terminals. Being aware of our energy footprint helps us save. It helps us pick the right supply rates, and to live in harmony with nature. Save. It helps us pick the right supply rates, and to live in harmony with nature.

### **ENERGY-CONSUMPTION CONTROL-MODULES**

### **OH/GEN module**

This is an actuator module for controlling loads and reading power consumption levels. The device has the following applications:

#### LOADS CONTROL UNIT

(scheme 1)

Used alone, it controls up to eight electric loads, which it connects and disconnects from the mains power supply, according to preset priority levels, so that the total absorption does not exceed the contractual limits. The total absorbed power reading is done via a standard-supplied toroid and the electrical loads control is done via standard relay outputs.

#### MODULE FOR READING POWER CONSUMPTION

(scheme 2)

If connected to the ETI/DOMO system server, the module simply detects the absorbed power level and sends this to the server, which in turn manages the up to 100 connected loads. You control the module by following the consumption-per-hour diagram, which you can set up on the terminal's screen. This maximum acceptable consumption readings for the various times of the day. The system will respect these limits, by connecting and disconnecting the controlled loads according to preset priorities. Each controlled device, can also be assigned four daily time-slots during which the device will undergo a loads test; in the other intervals the load will remain deactivated.

On the touch-screen terminal you can view current and historical data of the connected loads' total consumption. Whenever necessary you can remove one or more utilities from the control, so that you can manage them manually and separately.

#### ACTUATOR FOR CONTROLLING LOADS THAT READS CONTROLLED- LOAD CONSUMPTION LEVELS

(scheme 3)

If you want to view the consumption level of single controlled loads, besides the total level, that is, you can use various OH/GEN modules configured as toroid-fitted output modules for reading absorbed power levels. In this case each OH/GEN module activates and deactivates the load via a relay output fitted on the module, and detects its absorption via the toroid. The ETI/DOMO system server manages the loads, according to the modes explained in the previous point.

On the touch-screen terminal you can view current and historical data of each load's consumption. Whenever necessary you can remove one or more utilities from the control, so that you can manage them manually and separately.

#### MODULE FOR READING THE CONSUMPTION OF SEVERAL LOADS

(scheme 4)

When connecting the three external toroids, the OH/GEN module gives the absorbed power readings of three generic loads. On the touch-screen terminal you can view current and historical data of each load's consumption. When configured this way, the device also gives the produced and consumed power-level reading when used with photovoltaic-powered systems.

#### FITTING WITH PHOTOVOLTAIC PANELS. LOADS CONTROL DEPENDING ON THE POWER PRODUCED

(scheme 5)

With systems powered by photovoltaic panels, by using two toroids, one connected downstream from the counter and one at the output of the panels. the OH/GEN gives readings and viewings of the power produced, consumed and the difference between the two values, on the touch-screen terminal. In this configuration, you can also control loads, connect and disconnect them from the power-supply according to the power actually produced and not according to a preset limit.



NOTE: for controlling tri-phase loads, the system is set up to fit the Schneider PM3250 power meter; for details on this application, please contact the technical assistance service.

Viewing consumption data on the touch-screen terminal.

The described functions are especially useful to prevent power outages from exceeding contractual consumption limits, and, to really exploit the advantages provided by time-slot contracts available on the market.



#### CODE: 67800010

#### ID: OH/GEN

Lets you control 8 electrical loads to prevent energy supply attachment due to overload. It also lets you read energy consumption levels of three different electrical utilities thanks to the toroids that can be connected externally. It features one relay output for controlling an electric load. Supplied with one OH/TR01 toroid. The container can be installed in a switchboard on a DIN rail.

Dimensions: 2 DIN modules

# IMPULSE COUNTER CARD FOR READING ENERGY CONSUMPTION



#### CODE: 67600450

#### ID: OH/CI

Features 6 inputs for reading consumption from meters equipped with pulse outputs (water, gas). Sends the values measured on the meters to the bus and enables the energy values measured to be displayed on the touchscreen. The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

*Dimensions: 56 x 53.5 x 18 mm* 

#### EXTRA TOROID FOR THE OH/GEN MODULE



### CODE: 67800020

#### ID: OH/TR01

Extra toroid to use paired with the OH/GEN actuator module for controlling loads and reading energy consumption.

*Dimensions: 37 x 25 x 22 mm* 

	OH/GEN	OH/CI
Power supply (V DC)	20	20
Current draw at 20 V (mA)	5.5	5
Inputs for toroid connection	3	-
Maximum detectable power (KW)	10	-
Pulse counter inputs	-	6
Outputs	1	-
Type of output	NO contact	-
Resistive load that can be controlled at 230 VAC (A)	10	-
Inductive load ( $\cos \phi 0.5$ ) controllable at 230 V AC (A)	5	-
Dimensions (mm or DIN)	2	56 x 53.5 x 18
Container material	ABS	ABS
Operating temperature (°C)	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation

### THE OH/GEN USED AS A LOADS CONTROL-UNIT



Used by itself it can serve as a loads control-unit. The total absorbed power reading is done via a standard-supplied toroid and the electrical loads control is done via standard relay outputs.

### OH/GEN USED FOR READING THE ENERGY CONSUMPTION DATA

#### scheme 2



If connected to the ETI/DOMO system server, the module detects, via the toroid, the absorbed mains-power value and sends it to the server, which in turn manages the connected loads. The loads can be controlled via standard relay outputs. The touch-screen terminal shows the current and historical total consumption of the loads.

### OH/GEN USED FOR READING READING THE CONTROLLED-LOAD CONSUMPTION



The module activates and deactivates the load via its relay output which detects the absorption via the toroid. The loads are managed via the ETI/DOMO system server. The touch-screen terminal displays the current and historical consumption data for each single load.

### OH/GEN USED FOR READING THE ENERGY CONSUMPTION DATA OF MULTIPLE LOADS



By connecting three external toroids, the OH/GEN is able to read the power absorbed by three electrical loads. The touch-screen terminal displays the current and historical consumption data of each single load.

The OH/Cl module provides complete consumption data. It features six inputs for consumption meters fitted with impulse outputs for water, gas and other utilities. The touch-screen will display the current and historical consumption data. Therefore the terminal, in this configuration, acts as power dashboard.

### OH/GEN WHEN CONNECTED TO PHOTOVOLTAIC PANELS



By using two toroids, one connected to the output of a photovoltaic system and one downstream from the counter, the OH/GEN will detect and display on the touch-screen terminal the energy produced, the energy consumed and the resulting value between the two. The loads are controlled depending on the energy that is actually produced and are disconnected when the difference between:

## **ENERGY CONSUMED (1) – ENERGY PRODUCED (2)**

Exceeds the limit set by the user.



Energy consumption readings (1) on the touch-screen terminal



Energy production readings (2) on the touch-screen terminal



### SYSTEM SUPERVISION

## TOTAL CONTROL AT A GLANCE





A system server plus touch-screen terminals ensure supervision and control of the entire system, by controlling all of the home-automation modules and the security system.

The range of terminals is broad and well stocked to meet the needs of all our users. It features affordable devices for controlling small systems with limited needs. But also high-level devices with large, ergonomic screens. The system server provides full control from your smartphone or tablet after downloading and installing the **CAME DOMOTIC App**. This gives you access to a simple, intuitive graphic interface that is designed to facilitate interaction with the system and make all the available functions readily usable by users. Your home is under your control, at a glance!

### SYSTEM SERVER AND GATEWAY

### ETI/DOMO system server

The **CAME DOMOTIC 3.0** home-automation system features a particularly innovative architecture which make it user-friendly and easy-to-install. It can also be amplified and it gives unmatched performance.

Besides the home-automation modules, which are designed to provide comfort, security and savings, the system also features its own server which holds the intelligence to supervise all of the installed equipment.

The ETI/DOMO system-server is connected, on one end to a LAN (Local Area Network) to exploit all of its speed and extension characteristics, and on the other end to a fieldbus via the OH/SER interface, which is reserved for home-automation modules that exchange data among each other in an autonomous and stable way.

The LAN lets you connect to the server via the TS7 and TS10 touch-screen terminals to manage the control of the system by way of customizable graphic pages, simply and intuitively. Alternatively, or additionally, to the touch-screen terminals, you can connect to the system server via a Wi-Fi connection by suing handheld devices, like tablets or smartphones, running the specific **CAME DOMOTIC App** so as to have available the same graphic interface used on the terminals for controlling the system.



### INSTALLATION EXAMPLE

The LAN also lets you connect the system to burglar-alarm control units of the Proxinet, Bpt and CAME Cp lines. This lets you have centralized control over two systems. In this way, the home-automation and burglar-alarm system will integrate perfectly, while maintaining their autonomy and remaining compliant to their respective product and system regulatory standards.

The system can be programmable by suing the corresponding PC-installed programming tool.
# **OH/GW system gateway**

This controls the data traffic among the various branchings of a home-automation system to guarantee maximum security in the data transmission. As shown in the diagram, each OH/GW controls a branch of the system which can total up to 40 modules, or even 80 modules, by using the NH/RBB repeater - see the System Sizing section. The MM or MultiMaster bus line guarantees that the various OH/GWs talk to each other. You can connect up to 10 devices to the MultiMaster bus. This architecture lets you set up systems with high numbers of modules spread across important distances.





The **CAME DOMOTIC App**, available for IOS and Android, replicates, on a handheld device, the graphic interface of the touchscreen terminals.

# Various system servers connected over the LAN network

The system can be further expanded by connecting various system servers over the LAN network. As shown in the diagram, thanks to the two Ethernet ports provided by the ETI/DOMO, various system branches, each coming under their corresponding OH/SER, can be connected among themselves over the LAN and therefore exploit the speed of transmission and characteristic extensions of such a network.



## INSTALLATION EXAMPLE

The ETI/DOMO, as stated in the Remote Control section can also connect up to the CAME Group Cloud. This is for remotely controlling the installed devices.

### RS422 INTERFACE - HOME-AUTOMATION BUS

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#### CODE: 67100131

#### ID: ETI/DOMO

Lets you control the home automation modules in the system. It connects the system to the LAN network, to which you can connect the touch-screen terminals. It performs the function of system master for controlling the system via handheld smart-devices which have installed the corresponding **CAME DOMOTIC App**. It is set up to connect the system the Cloud, to remotely

control the installed equipment. The container can be installed in a switchboard on a DIN rail.

Dimensions: 6 DIN modules



#### CODE: 67100150

#### ID: OH/SER

It is for connecting the ETI/DOMO system server to the home-automation bus by connecting to the RS422 port fitted on the server. The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 85.5 x 60 x 21 mm



#### CODE: 67100702

#### ID: OH/GW

Allows communication between various branches of the home automation bus and guarantees maximum transmission security. It also enables a connection to the MultiMaster bus for connecting Mitho-series touch-screen terminals and extra system gateways for controlling different sections of the system.

The container can be installed in a switchboard on a DIN rail.

Dimensions: 4 DIN modules

	ETI/DOMO	OH/SER	OH/GW
Power supply (V DC)	12-24	12-24	12-24
Consumption at 18 V (mA)	220	30	220
RS422 port	1	1	1
RS485 port	1	-	1
USB port	1	-	1
Ethernet port 10/100Mb	2	-	2
Dimensions (mm or DIN)	6	85.5 x 60 x 21	4
Container material	ABS	ABS	ABS
Operating temperature (°C)	0 - 35	0 - 35	0 -35
Relative operating humidity (%)	93 No condensation	93 No condensation	93 No condensation

# **TOUCH-SCREEN TERMINALS**

## TS7 and TS10 touch-screen terminals

These are innovative devices. They are the ideal solution for supervising the system from a dedicated, stable and always available station. They connect up to the system server over the LAN.

They feature on-board microphones and speakers to work as receivers to the video entry system. They also feature a VGA video camera for video intercoms with other system terminals.

The power supply can be provided by an external 24 V DC power supply unit or directly via POE (Power Over Ethernet ) network cable. They integrate two inputs and two outputs of the home-automation system which are found on the terminal board, for managing controls and activations of devices located where the terminal is located.

Thanks to the USB port and the SD Card slot, fitted on the terminals, you can also manage multimedia content.

## **RECESS-MOUNTED**



## WALL-MOUNTING



NOTE: when installing onto the wall, to allow for the passage of the network cable, we suggest fitting a rectangular or round wallmounting box.

### **10" TOUCH-SCREEN TERMINAL**



#### CODE: 67200180

#### ID: TS7

It is for controlling the system via a simple and intuitive graphic interface. Browsing takes place via the control menu or the graphic maps which show images of the various rooms in the home. Connects directly to the system server via the LAN. It is set up to operate as a video-intercom entry panel. It features a USB port and SD Card slot for reproducing multimedia content. Seven-inch 16/9 display Black front panel, white base.

Can be installed recessed or wall-mounted.

#### Dimensions: 217 x 144 x 35.8 mm



#### CODE: 67200190

#### ID: TS10

It is for controlling the system via a simple and intuitive graphic interface. Browsing takes place via the control menu or the graphic maps which show images of the various rooms in the home. Connects directly to the system server via the LAN. It is set up to operate as a video-intercom entry panel. It features a USB port and SD Card slot for reproducing multimedia content. Ten-inch 16/9 display. Black front panel, white base.

Can be installed recessed or wall-mounted.

Dimensions: 288 x 187 x 35.8 mm

#### **RECESS BOX**



CODE: 67900150 ID: TS BOX Recess-mounting box for 7" and 10" terminals. *Dimensions: 186 x 132 x 53 mm* 

\*With the TS7 terminal, use the VAS/101 power-supply unit; with the TS10 terminal, use the VS/100.30 power-supply unit.

	TS7	TS10
Power supply (V DC)	12-24	12-24
Absorption at 18 V (mA)*	350 - with USB 510	520 - with USB 680
POE lighting	Yes	Yes
SD Card Slot	1	1
USB port	1	1
Ethernet port 10/100Mb	1	1
Loudspeaker	Yes	Yes
Microphone	Yes	Yes
Video camera	Yes	Yes
Inputs	2	2
Outputs	2	2
Dimensions (mm)	217 x 144 x 35.8	217 x 144 x 35.8
Container material	ABS	ABS
Operating temperature (°C)	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation

# TS7 WIFI and TS10 WIFI touch screens

They feature the same characteristics of the devices connected over the LAN. When connecting in Wi-Fi mode to the system server, they are the ideal solution when restructuring or installing in buildings where the cable could be a problem.

The power supply is provided via an external 24 V DC power-supply unit.

## INSTALLATION EXAMPLE



#### **7" TOUCH-SCREEN TERMINAL WITH WIFI CONNECTION**



#### CODE: 67200250

#### ID: TS7 WI-FI

It is for controlling the system via a simple and intuitive graphic interface. Browsing takes place via the control menu or the graphic maps which show images of the various rooms in the home. Connects directly to the system server via the LAN. It is set up to operate as a video-intercom entry panel. It features a USB port and SD Card slot for reproducing multimedia content. Seven-inch 16/9 display Black front panel, white base. Can be installed recessed or wall-mounted.

Dimensions: 217 x 144 x 35.8 mm

### **10" TOUCH-SCREEN TERMINAL WITH WIFI CONNECTION**



## **CODE 67200260**

### ID: TS10 WI-FI

It is for controlling the system via a simple and intuitive graphic interface. Browsing takes place via the control menu or the graphic maps which show images of the various rooms in the home. Connects directly to the system server via the LAN. It is set up to operate as a video-intercom entry panel. It features a USB port and SD Card slot for reproducing multimedia content. Ten-inch 16/9 display. Black front panel, white base.

Can be installed recessed or wall-mounted.

Dimensions: 288 x 187 x 35.8 mm

\*With the TS7 Wi-Fi terminal, use the VAS/101 power-supply unit; with the TS10 Wi-Fi terminal, use the VAS/100.30 unit.

	TS7 WI-FI	TS10 WI-FI
Power supply (V DC)	12-24	12-24
Absorption at 18 V (mA)*	500 - with USB 670	700 - with USB 870
SD Card Slot	1	1
USB port	1	1
Ethernet port 10/100Mb	1	1
Wi Fi connection	Yes	Yes
Loudspeaker	Yes	Yes
Microphone	Yes	Yes
Video camera	Yes	Yes
Inputs	2	2
Outputs	2	2
Dimensions (mm)	217 x 144 x 35.8	288 x 187 x 35.8
Container material	ABS	ABS
Operating temperature (°C)	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation

# **System functions**

The 7" and 10" versions of the touch-screen terminals coupled with the ETI/DOMO system provide control, via a corresponding control menu or graphic maps that show images of the various rooms, of the following functions:

- Lighting control with on/off and dimmering controls
- Motor-powered openings
- Temperature Control
- Controllo carichi
- Consumption log
- Manage technical alarms
- Manage scenarios
- Timers
- Control logics
- Burglar-alarm system management
- Viewing of video camera images
- Sound diffusion
- Sprinkler system management
- Video entry systems





Control menu - Browse by function

Browse by customizable graphic maps

### TECHNICAL ALARM MANAGEMENT

The system lets you centralize and view the state of the corresponding technical-alarm detectors, such as, gas leak detectors and water-leak detectors that are connected to the input modules.

#### MANAGE SCENARIOS

The term 'scenario' means a series of commands sent to various devices that can be activated by a single actions. The 'Night' scenario will roll down all shutters, switch off all the lights, arm the burglar alarm and set the nighttime temperature. On the system server, you can program a series of scenarios, that can then be activated via the corresponding icons or corresponding input modules.

#### TIMERS

The system can be set up to activate electrical loads during preset time slots. The program, which users can set up, lets you define 4 timers for each day of the week.

#### **CONTROL LOGICS**

The system is for programming the control of various devices. It processes signals from digital and analog inputs, according to the following control logics:

AND	It provides a "real" output, only when all the inputs are also "real".
OR	It provides a "real" output when at least one input is "real".
XOR	It provides a "real" output only when the two inputs are the opposite in terms of logic conditions.
COMPARER	This is for comparing the value of two analog inputs or two temperatures. It providesa "real" output only when the
	first input is lesser than the second one. A comparative hysteresis can also be added.
ADDER	This is for summing (even with weighted sums) two analog inputs or two temperatures, when you want to average two
	temperatures. This logic function can also be used as an input of a compare function.
DELAY	This is for delaying the exit-logic action, for example, when prolonging the pressure to be exerted on buttons. Up to 4
CONSTANT	The value is constant. Used as a comparer input, it can some as comparison of an appled input or of a
CONSTANT	temperature reading.

#### NOTE:

the logics described herein are also available via the QH/3RPI module for systems that do not use the ETI/DOMO system server.

#### **BURGLAR-ALARM SYSTEM MANAGEMENT**

Integrating the burglar-alarm and the home-automation systems results in very interesting and unique performance levels. This particular connecting enables the terminals to supervise and control, that is, besides the home-automation devices, also the burglar-alarm unit. It also ensures that information is exchanged fairly between the two systems. The connection between the two systems takes place over the LAN, as shown in the various illustrations.



The system server is constantly informed on the state of the of the control unit's inputs and outputs. It is therefore possible to set up, via corresponding programmable logics, actions on the home-automation system when events take place in the security system. For example, switching on the garden lighting when an outdoor barrier detects an intrusion, or blocking the temperature control of a temperature zone when a window fitted with a magnetic contact is opened. The control unit's outputs can also be controlled from the terminal, to activate electrical utilities.

Scenarios that act on both systems can also be programmed. For example the "GOING OUT" scenario that turns off the lights, lowers the shutters, arms the burglar alarm, and so on. While the systems are perfectly integrated, they remain compliant with their corresponding regulatory standards regarding products and systems.

#### **VIEWING IMAGES FROM VIDEO CAMERAS**

Several video cameras can be connected to the system to view the various zones around the home. If the system is fitted with the burglar-alarm control unit, when an alarm is activated, you can view images of the area from which the alarm gas been activated. The system is compatible with the main IP video cameras of the CAME range (\*).

## INSTALLATION EXAMPLE



#### SOUND DIFFUSION

The system can diffuse music and sounds to the various rooms around the home by using the LAN to connect to professional audio systems. Such a system must feature a sound diffusion control unit that can receive CD, tuner, MP3 and so on, type signals over its inputs. It then amplifies them and sends them to the speakers which are installed in the various rooms around the home. The terminal is set up with a graphic interface which replicates the various commands which are normally available on the control-unit's front panel. So, you can pick a room and assign it one of the sound sources, and then adjust the sound. The system is compatible with the Tutondo control units of the Mondo T(\*) series, and with popular Yamaha amplifiers.

#### SPRINKLER SYSTEM MANAGEMENT

The system also has a program to manage the garden sprinkler. The individual sprinklers, controlled by digital outputs, can be grouped into sectors (logical areas). Various sprinkler scenarios can be set up to water various zones. These can be manually or automatically activated by the weekly scheduler, which controls the sprinklers with scheduled, cyclical sequences. Scenarios and programs can be customized according to local weather conditions so your system doesn't waste water. Each of the sectors can be activated and deactivated even automatically via special sensors which are connected the system's inputs, such as for blocking the system via the rain sensor.

(\*) NOTE: for all details about this applications, please contact our technical assistance service.

# TS4.3 BK and TS4.3 WH touch screens

The 4.3", touch-screen terminals of the **CAME DOMOTIC 3.0** home-automation system connected directly to the home-automation bus and via a dedicated menu, provide simple intuitive control of the following functions:

- Lighting control with on/off and dimmering (up to 40) controls
- Generic outputs control (up to 40 relays)
- Control of motorised openings (up to 40)
- Temperature control of up to eight zones
- Manage basic scenarios with multiple on/off controls towards controlled devices. Up to 40)
- Controllo carichi
- Viewing historical energy consumption reports
- Timer controls for up to 20 timers.

If the system is running the ETI/DOMO system server, they also enable:

- Activation of burglar-alarm scenarios
- Activation of all scenarios featured in the system server itself.

Besides managing the home-automation modules, they stand out thanks to their energy saving characteristics. They are for controlling 8 temperature zones, managing 8 electric loads and viewing the corresponding consumption reports when paired up with the OH/GEN energy management module. These are ideal for simple installations that still require performance and efficiency from a home-automation system. In large systems that are controlled by the ETI/DOMO server, these can be used as room controllers.



## **INSTALLATION EXAMPLE**



### **BLACK, 4.3" TOUCH-SCREEN TERMINAL**

### WHITE, 4.3" TOUCH-SCREEN TERMINAL



#### CODE: 67200270

#### ID: TS4.3 BK

This is for controlling a series of home-automation functions for a basic system via an corresponding control menu. Direct connection to the home automation bus for module management. Display 4.3" 16/9. Wall mounting. Black.

Dimensions: 166 x 112 x 25.6 mm



#### CODE: 67200280

#### **ID: TS4.3 WH**

This is for controlling a series of home-automation functions for a basic system via an corresponding control menu. Direct connection to the home automation bus for module management. Display 4.3" 16/9. Wall mounting. White.

Dimensions: 166 x 112 x 25.6 mm

	TS4.3 BK - TS4.3 WH	
Power supply (V DC)	20	
Current draw at 20 V (mA)	90	
Display	16:9 Wide screen 4.3"	
Resolution (Pixels)	480 x 272	
Controllable temperature zones	8	
Dimensions (mm)	166 x 112 x 25.6	
Container material	ABS	
Operating temperature (°C)	5 - 50	
Relative operating humidity (%)	93 No condensation	





CAME 🕇

**REMOTE CONTROL** 

# WHETHER HOME OR AWAY, YOU CAN REMOTELY MANAGE YOUR SYSTEM



Today, home-automation systems go beyond the four walls. The home needs protection at all times, even when you are away. the remote control lets you have full control of all the available functions. This is possible thanks to CAME'S Cloud Service, on which users connect to the internet from their homes to manage their systems. It will therefore be possible to view the state of all the rooms, their video camera images, and to activate scenarios, plus control various utilities, and so on. In one word, remotely interact with the system, as if you were on-site.

# **CAME CONNECT**

CAME Group offers our Cloud service to ensure our users have a simple, safe and highly reliable remote connection to their system over the internet.

That's why the ETI/DOMO system-server uses CAME Connect technology for connecting the home-automation system to the Cloud over a VPN (Virtual Private Network) connection. Users can directly connect to the Cloud at any time over their handheld devices that have installed the corresponding **CAME DOMOTIC App.** This gives the users a secure graphic interface of their system.



CAME Group's Cloud is set up to enable users, on one hand, to connect to the system, so that they may remotely manage the system, and on the other, it enables installers to connect to the system so that they may, by permission from users, perform remote-assistance diagnoses and programmings.

## INSTALLATION EXAMPLE





### CODE: 67100131

### ID: ETI/DOMO

Lets you control the home automation modules in the system. It connects the system to the LAN network, to which the touch-screen terminals can be connected. It performs the function of system master for controlling the system via handheld smart-devices which have installed the corresponding **CAME DOMOTIC App** It is set up to connect the system to the Cloud to remotely control the installed equipment. The container can be installed in a switchboard on a DIN rail.

Dimensions: 6 DIN modules

	ETI/DOMO	
Power supply (V DC)	12-24	
Consumption at 18 V (mA)	220	
RS422 port	1	
RS485 port	1	
USB port	1	
Ethernet port 10/100Mb	2	
Dimensions (DIN)	6	
Container material	ABS	
Operating temperature (°C)	0 - 35	
Relative operating humidity (%)	93 No condensation	

## **GSM MODULES**

## **GSM COM module**

This is the ideal solution for systems that need a simple, cost-effective remote control. When installed in systems fitted with the YS4.3 terminals or the ETI/DOMO system server, it enables the sending of commands to the system and the receiving of state alerts via simple SMS messages. The following functions are included:

- Activating scenarios (up to a 16)
- Querying and setting temperatures in the temperature zones (up to 20)
- Technical alarm alerts in the home-automation system (up to 10)
- Malfunction alert (power off) and restoring of the home's power supply
- Automatic sending of the system state every 12 or24 hours (state of the batteries, GSM signal level and temperature in the first temperature zone associated to the combiner).

The device is also fitted with a normally open relay contact that can be used to activate the temperature regulators of Bpt's TH series set up for remote control - or any other device of the sort, that can be controlled via the opening or closing of a contact. zone associated to the combiner).

The device is also fitted with a normally open relay contact that can be used to activate the temperature regulators of Bpt's TH series set up for remote control - or any other device of the sort, that can be controlled via the opening or closing of a contact.

With each command message the combiner sends out a confirmation SMS message.

Bpt's TH Thermo App, available for Android devices, is for monitoring the temperature and energy consumption in homes. Though intuitive graphics you can view two-day historical data of temperatures and humidity levels in the temperature zones and the energy consumption of the home.



# INSTALLATION EXAMPLE



### CODE: 67100031

### ID: GSM COM

Lets you send commands to the home automation system in the form of simple text messages. It is for activating scenarios, controlling temperature zones, receive messages in case of any technical alarms. The container can be installed in a switchboard on a DIN rail.

Dimensions: 4 DIN modules

	GSM COM
Power supply (V AC)	230
Absorption (mAac)	13 - 90
Type of GSM module	GSM/GPRS Dual Band 900/1800 MHZ modem
Exit	1
Output type (V/A)	Contact 24/1
Batteries (necessary for message sending with no power-supply)	Three, AAA, rechargeable, NiMH or NiCd batteries
Dimensions (DIN)	4
Container material	ABS
Operating temperature (°C)	0 - 40
Relative operating humidity (%)	90 No condensation





## **RADIO-BASED DEVICES**

# COMFORT, SAVINGS AND SECURITY? THE SOLUTION RUNS ON MORE THAN CABLES!

The home-automation system provides comfort, savings and security solutions, which are indispensable today. But what to do when masonry work is out of the question?

The **CAME DOMOTIC 3.0** home-automation system features radiobased modules that can provide a good number of the solutions available over wire. The radio modules, powered by the municipal grid, integrate seamlessly into traditional electrical systems. They also provide automation and control functions, thereby exceeding the structural limits and providing the desired functions, without limitations.

To ensure maximum flexibility, the radio modules can also communicate with the wired modules, to join simple installation with full functionality.

The radio devices are simple and performing, they provide solutions tailored for each room. Also communicate with the wired modules, to join simple installation with full functionality.

The radio devices are simple and performing, they provide solutions tailored for each room.

# **DIGITAL INPUT AND OUTPUT MODULES**

# Modules OH/4IWL OH/1016WL OH/2016WL OH/1005WL

The radio modules provide home-automation functions with no need to lay the bus cable. They are ideal for all buildings were no masonry work is possible to lay cables.

**OH/4IWL**This is a 230 V AC 4-digital input radio module. The inputs can send single commands, such as for lights, or double commands, such a for the shutters motor, to the corresponding actuators. More precisely, each single input can pilot the output using the main, wired input-module logics, such as step-by-step, on/off, direct, enable, impulse, up/down.

**OH/1016WL** This is a radio actuator module with one digital output powered by 230 V AC.It features one input to which to connect a button for directly activating the output. The output, with NO potential free contact, enables the device to be connected directly, to replace traditional switches. It also enables control of the load, via the commands received by the input modules.

OH/105WLIt features the basic characteristics of the OH/1016WL, but with a lower rated output contact. Thanks to the small size of the casing, it even fits in standard three-module boxes.

## CONTROL OF TWO LIGHT POINTS



**OH/2016WL** This is a radio actuator module with two digital outputs powered by 230 V AC. It features two inputs to which to connect buttons for directly activating the outputs. The outputs, with NO potential free contact, enables the device to be connected directly, to replace traditional switches. It also enables control of the load, via the commands received by the input modules. The outputs can also be programmed to control double loads, such as for shutters motors, in interlocked mode. In this case the device can be installed directly into the shutter box.

#### $\bigtriangleup$ $\bigtriangleup$ $\bigtriangledown$ $\sim$ $\bigtriangleup$ $\sim$ OH/2016WL 230 V AC CAME $\sim$ OH/4IWL 11 $\sim$ 12 OH/4IWL 230 V AC OH/2016WL 230 V AC

CONTROL OF TWO MOTOR-POWERED SHUTTERS

The transmission among the various modules of the system allows the exchange of information in bidirectional mode.

NOTE: avoid installing with metal plates or metal panels.

## САМЕ 🕇

## MODULE WITH FOUR INPUTS VIA RADIO

## MODULE WITH 1 WIRELESS INPUT AND ONE OUTPUT



### CODE: 67600460

### ID: OH/4IWL

Features four x 230 VAC digital inputs for connecting control devices (buttons). It allows you to send four single commands (e.g. lights) or two dual commands (e.g. shutter motor). The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 56 x 53.5 x 18 mm



### CODE: 67600470

#### ID: OH/1016WL

The module features one relay output with potential-free NO contact, to control one electrical load, and one x 230 VAC digital input to connect control devices (buttons or switches). The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 85.5 x 60 x 21 mm

#### MODULE WITH TWO OUTPUTS AND TWO INPUTS VIA RADIO



## MODULE WITH 1 WIRELESS INPUT AND ONE OUTPUT



#### CODE: 67600480

#### ID: OH/2016WL

The module features two relay outputs with potential-free NO contact, to control two single electrical loads, such as lights, and two 230 VAC digital inputs to connect control devices (buttons or switches).

The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 85.5 x 60 x 21 mm

### CODE: 67600720

#### ID: OH/1005WL

The module features one relay output with potential-free NO contact, to control one electrical load, and one x 230 VAC digital input to connect control devices (buttons or switches).

The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 56 x 53.5 x 18 mm

	OH/4IWL	OH/1016WL	OH/2016WL	OH/1005WL
Power supply (V AC)	230	230	230	230
Absorption (mAac)	2	2	2	2.5
Transmission (MHz)	868.65	868.65	868.65	868.65
Modulation type	GFSK	GFSK	GFSK	GFSK
Inputs	4	1	2	1
Type of input contact	NO, NC	NO, NC	NO, NC	NO, NC
Length on input cables (m)	20	-	-	20
Outputs	-	1	2	1
Type of output	-	NO contact	NO contact	NO contact
Resistive load that can be controlled at 230 VAC (A)	-	10	10	5
Inductive load ( $\cos \phi$ 0.5) controllable at 230 V AC (A)	-	2	2	2
Dimensions (mm)	56 x 53.5 x 18	85.5 x 60 x 21	85.5 x 60 x 21	56 x 53.5 x 18
Container material	ABS	ABS	ABS	ABS
Operating temperature (°C)	0 - 35	0 - 35	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation	93 No condensation	93 No condensation

## **ANALOG MODULES**

## **OH/DI010WL - OH/DIWL modules**

### OH/DI010WL

It features one 0 - 10 V analog input, one relay output with NO contact for powering on and off the corresponding connected electrical load, plus one input for connecting control devices, such as buttons. The analog output sends a standard 0 - 10 V DC signal for controlling actuators fitted with standard 0 - 10 V inputs, such as proportional electrical valves, generic dimmers and fan coils. It can be programmed according to the functions available for wired, analog modules, that is, dimmer, linear, step, chase.

## CONTROL OF TWO LIGHT POINTS VIA DIMMER



### OH/DIWL

It features one 3W to 300W dimmer channel for controlling the brightness of lighting elements, plus one input for connecting control devices like buttons. The output can be programmed according to the functions available on the wired, analog modules, that is, dimmer, linear, step, chase.

It is for controlling the following electrical loads: incandescent lamps, 230V halogen lamps, 12V halogen lamps with ferromagnetic transforer, 12V halogen lamps with electronic transformer, compact or energy saving fluorescent lamps and LED lamps.



## MODULE WITH ONE X 0-10 V ANALOGUE OUTPUT WITH ONE WIRELESS DIGITAL OUTPUT AND ONE INPUT.



#### CODE: 67600710

### ID: OH/DI010WL

It features one 0 - 10 V analog input, one relay output with NO contact for powering on and off the corresponding connected electrical load, plus one input for connecting control devices, such as buttons. The container can be installed in a switchboard on a DIN rail or built into the bottom of the box.

Dimensions: 85.5 x 60 x 21 mm

## ONE CHANNEL DIMMER MODULE WITH ONE WIRELESS DIGITAL INPUT



#### CODE: 67600730

### ID: OH/DIWL

It features a 3W to 300W one-channel dimmer for controlling lighting and one input for connecting control devices such as buttons. The container can be installed in a switchboard on a DIN rail.

#### Dimensions: 2 DIN modules

	OH/DI010WL	OH/DIWL
Power supply (V DC)	230	230
Current draw at 20 V (mA)	2	2
Transmission (MHz)	868.65	868.65
Modulation type	GFSK	GFSK
Digital inputs	1	1
Type of input contact	NO, NC	NO, NC
Length on input cables (m)	Max 20	Max 20
Analogue inputs	-	2
Digital outputs	1	-
Types of digital outputs	NO contact	-
• Resistive load that can be controlled at 230 VAC (A)	10	-
$\bullet$ Inductive load (cos $\phi$ 0.5 ) controllable at 230 V AC (A)	2	-
Analog outputs	1	-
Dimmer outputs	-	1
Maximum power for controlling 230 V halogen lamps or (VA) incandescent lamps	-	300
Max power for controlling 12 halogen lamps with (VA)     ferromagnetic transformer	-	300
Max power for controlling 12 halogen lamps with (VA) CA or CC     (VA electronic transformer	-	300
Max power for controlling 230 V compact fluorescent lamps or (VA) energy saving lamps		150
• 230 V (VA) LED lamps		150
Low voltage LED with Driver	-	150
Dimensions (DIN)	85.5 x 60 x 21	2 DIN
Container material	ABS	ABS
Operating temperature (°C)	0 - 35	0 - 35
Relative operating humidity (%)	93 No condensation	93 No condensation

# **RADIO BUS INTERFACE MODULE**

## **OH/RXBD** module

The radio modules can be an integral part of the home-automation system and contribute with complete system solutions. Thanks to the OH/RXBD receiver transmitter, connected directly over the home-automation bus, you are ensured maximum compatibility among the hardwired and radio-based modules. The radio inputs such as on the OH/4IWL module can control hardwired outputs, such as on the OH/3RPI module. Vice versa, hardwired inputs such as on the OH/&I module, can control radio-based outputs, such as on the OH/2O16WL module. In the configuration shown below, communication can take place even among radio modules, by going over the bus line.

The system can be programmed via the corresponding CAME D SW tool, installed on a PC, which does not discriminate between radio-based or hardwired and enables each module to be assigned with the corresponding functional parameters, to ensure all the possible associations among the system's inputs and outputs.

## **EXAMPLE INSTALLATION**



The transmission among the various modules of the system allows the exchange of information in bidirectional mode.

NOTE: avoid installing with metal plates or metal panels.

### **BI-DIRECTIONAL BUS RADIO INTERFACE**

11111			
CAME			

#### CODE: 67100160

#### ID: OH/RXBD

This enables dialogue between wireless devices and wired devices connected to the home automation bus. Wall mounted.

Dimensions: 80 x 120 x 25 mm

	OH/RXBD
Power supply (V DC)	20
Current draw at 20 V (mA)	11
Transmission (MHz)	868.65 Bi-directional
Modulation type	GFSK
Dimensions (mm)	80 x 120 x 25
Container material	ABS
Operating temperature (°C)	0 -35
Relative operating humidity (%)	93 No condensation
Operating temperature (°C)	0 - 40
Relative operating humidity (%)	90 No condensation

## **RADIO CHRONO-THERMOSTATS**

# TH/500 WH WL chrono-thermostat

The TH/500 WH WL is a radio-based chrono-thermostat with a touch-screen display of Bpt's wall-fitting range. It talks to radiobased output modules of the **CAME DOMOTIC 3.0** home-automation range for controlling boilers and electric-valves in heating and cooling systems.

It has the following technical characteristics:

- Battery powered by two 1.5 V AA batteries
- Backlit touch-screen display
- Weekly scheduling
- Three-level temperature programming
- On-board proportion adjusting program.
- Summer-Winter-Off operation
- Range of controlled temperature 3 35° C
- Temperature differential adjustments 0 0.9° C
- Precision 0.3° C
- Jolly program
- Antifreeze function
- Postponed powering on or off
- Automatic power-on preview
- Calibrates temperature measurements

## **EXAMPLE INSTALLATION**



The transmission is in all cases bidirectional: the chronothermostat receives confirmation that the output has executed the command.

NOTE: avoid installing into the OH/1016WL with metal plates or metal panels.

### **CHRONOTHERMOSTAT VIA RADIO**



#### CODE: 69400350

#### ID: TH/500 WH WL

Radio-based wall-mounted, touch-screen chronothermostat. It talks to the output module via radio for controlling the zone boilers or the electric valves for heating and cooling systems. Wall mounted.

Dimensions: 140 x 91 x 24 mm

	OH/TH500 BK WL	
Power supply	Two 1.5 V AA batteries	
Radio transmission (MHz)	868.65 Bi-directional	
Modulation type	GFSK	
Dimensions (mm)	140 x 91 x 24	
Container material	ABS	
Operating temperature (°C)	0 - 35	
Relative operating humidity (%)	93 No condensation	

# **DESCRIPTION OF RADIO NETWORK OPERATION**

The range of radio devices is designed to provide a vast series of system solutions. From small systems when simple and immediate operator functions are required, to more complex solutions for large compounds. Find the possible configurations below.

# Point-to-point configuration

In this configuration the modules are associated among themselves via simple manual procedure, by directly pressing the programming buttons featured on the devices. Each single output can be controlled by at most 32 inputs, while each input can control up to eight output modules. It is possible, for example, to control the output of an OH/1016WL module from 32 single inputs on OH/4IWL modules. Likewise, from the two inputs of an OH/4IWL you can control the simultaneous up and down movements of 8 shutter motors.

By using the above described manual programming procedure, the inputs of the OH/1016WL and OH/2016WL modules are local, that is, they only control the outputs of their own module. Through the CAME D SW programming tool you can program said inputs for controlling the outputs of other modules.

Above described manual programming procedure, the inputs of the OH/1016WL and OH/2016WL modules are local, that is, they only control the outputs of their own module. Through the CAME D SW programming tool you can program said inputs for controlling the outputs of other modules.



## EXAMPLE POINT-TO-POINT CONFIGURATION

# **Configuration with concentrators**

If you need to expand the network, yo can use the configuration with concentrators. The concentrator is a regular module, that when specifically programmed can collect signals coming from the system's radio modules. The concentrator modules talk to each other so as to obtain the network shown in the figure.

The programming is done via the CAME D SW programming tool that is installed in the PC. The corresponding IPC/MH interface is an OH/RXBD radio interface, as shown in the figure. The program lets you view the state of the connections to check whether all the modules are properly talking among themselves.

Done via the CAME D SW programming tool that is installed in the PC. The corresponding IPC/MH interface is an OH/RXBD radio interface, as shown in the figure. The program lets you view the state of the connections to check whether all the modules are properly talking to among themselves.

## EXAMPLE CONFIGURATION WITH CONCENTRATORS



The general parameters for this configuration are as follows:

- Up to 32 modules associated to one concentrator
- Up to 4 modules with concentrator function
- Up to 128 modules in total
- Up to 2 concentrators on the signal path: MR-MC-MC-MR
- The TH/500 WH WL radio chronothermostat can be added to the system but it cannot be used a concentrator module

# Mixed radio/wired configuration with receivers connected over bus

When using a mixed radio/wired configuration as shown in the figure, the concentrator function can be performed, besides by a radio modules that is specifically programmed for this function, directly by an OH/RXBD receiver.

In this case the programming is done via the CAME D SW programming tools installed on a PC along with the corresponding IPC/MH interface (or by connecting to the ETI/DOMO server or to the OH/GW gateway. The program lets you view the state of the connections to check whether all the modules are properly talking among themselves. Case the programming is done via the CAME D SW programming tools installed on a PC along with the corresponding

IPC/MH interface (or by connecting to the ETI/DOMO server or to the OH/GW gateway. The program lets you view the state of the connections to check whether all the modules are properly talking among themselves.

## EXAMPLE OF MIXED RADIO/WIRED CONFIGURATION



- Up to 16 receivers concentrator over bus (OH/(RXBD)
- Up to 32 modules associated to a receiver-concentrator over bus (OH/RXBD)
- Up to 4 modules with radio concentrator function (for each OH/RXBD)
- Up to 32 modules associated to a radio concentrator
- Up to 254 modules in total
- Signal's maximum path: MR-MC-OH/RXBD-MC-MR
- The TH/500 WH WL radio chronothermostat can be added to the system but it cannot be used a concentrator module

# **INTEGRATING WITH BURGLAR-ALARM RADIO DEVICES**

The radio home-automation modules can be integrated with CAME'S burglar-alarm range radio devices to obtain very interesting system solutions. Below are some example uses.

## **PXWRC04 RADIO CONTROL**

Each of the buttons on the PXWRC04 remote control can be programmed to activate a scenario from the control unit, or a homeautomation module or even both. You can, for example, activate a scenario for switching on the control units and for controlling two OH/1016WL output modules in step-by-step mode (diagram 1), or, control the opening and closing of a group of shutter motors via the OH/2016WL modules (diagram 2), or even engage the control unit and lower the shutters simultaneously.





## **PXWRC16 RADIO CONTROL**

Similarly, even the 16 channels of the PXWRC16 radio control can be individually programmed to activate scenarios for switching on the control unit, home-automation modules (diagrams 3 and 4), or both.

scheme 3



#### scheme 4



## **PXWIR01 VOLUMETRIC DETECTOR**

The PXWIR01 radio volumetric detector can be programmed to activated the output of an OH/1016WL module in timer mode (diagram 5). This application can be useful for switching on lights when persons pass through the zone that is controlled by the detector.

#### scheme 5



## **PXWIR01 VOLUMETRIC DETECTOR**

The PXWIR01 radio volumetric detector can be paired with the OH/DI010WL analog output module (diagram 6). This application if for controlling the dimmed light point depending on whether there are people in the room or not. After five minutes from the latest detection, the value of the output is reduced by 20%. After another five minutes the light is switched off.





## **PXWCOB01 PERIMETER DETECTOR**

The radio-based PXWCOB01 perimeter detector can be programmed to activate the output of an OH/1016WL module in ON/ OFF mode. In this configuration, the outputs of the module will chase the open or closed state of the door or window on which the detector has been installed (diagram 7). This application is useful when you want to exclude a thermostat's temperature control, such as with Bpt's TA/450, when a window is opened in the managed zone, to prevent wasteful energy loss.



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HOME AUTOMATION / RADIO-BASED DEVICES

## **PXWCOB01 PERIMETER DETECTOR**

To have a system like the previous one you can use the TH/500 WH WL radio-based chrono-thermostat. In this case the perimeter detector talks directly with the OH/1016WL (diagram 8).

scheme 8


## **PXWIR01 VOLUMETRIC DETECTOR**

The radio-based PXWIR01 volumetric detector can be paired with the radio-based TH/500 WH WL chrono-thermostat and to the OH/1016WL output module. (diagram 9).

In this case the thermostat regularly manages the temperature according to the program that is set up, while the detector picks up any motion by people in the room. After a two-hour interval from the last person detected, that is, when there are no people in the room, the temperature regulator adjusts the temperature to a fixed, programmable value. This application prevents wasted energy from powering on the heating when no one is home.

This function is required by regulation EN15232 and by the corresponding CEI 2015-18 guide, for obtaining a Class A energy rating. To improve the system's efficiency you can install several volumetric detectors.



Solutions like the ones shown in diagrams 8 and 9 can be obtained by using the OH/DI010WL module for controlling modulating valves.



## **VIDEO ENTRY SYSTEMS**

# SEE, TALK, CONTROL AND PROTECT



Among the typical security functions of high-level, home-automation systems, video-entry plays a vital role. Controlling and protecting access points outside of your home is a must in modern homes. The home-automation system connects to the Bpt video entry panels, so that the touch-screen terminals can function, that is, besides the required control-functions, as indoor receivers, so as not to need any extra devices.

## **SYSTEM SERVER**

## ETI/DOMO XIP system server

Integrating the home-automation and the video entry systems is done via the ETI/DOMO XIP system server, which, besides featuring all of the functions provided by the ETI/DOMO server, also ensures a LAN connection to the outdoor video intercom panels of Bpt's XIP series. This enables the TS7 and TS10 touch-screen terminals to operate as indoor receivers.

The server has two, 10/100 Mbits Ethernet network interfaces which can be configured to "switch" or "dual network" mode. The latter, is for separating the indoor LAN in the apartment from the apartment building's LAN. So, users can have their own network while receiving calls for the entry panel via the common network. All this takes place securely, so that each apartment supplied with the ETI/DOMO XIP can only see its own local network, and not that of the other tenants. The common LAN is only shared for calls from the outdoor entry panels. Ethernet network interfaces which can be configured to "switch" or "dual network" mode. The latter, is for separating the indoor LAN in the apartment from the apartment building's LAN. So, users can have their own network while receiving calls for the entry panel via the common network. All this takes place securely, so that each apartment while receiving calls for the entry panel via the common network. All this takes place securely or "dual network" mode. The latter, is for separating the indoor LAN in the apartment from the apartment building's LAN. So, users can have their own network while receiving calls for the entry panel via the common network. All this takes place securely, so that each apartment supplied with the ETI/DOMO XIP can only see its own local network, and not that of the other tenants. The common LAN is only shared for calls from the outdoor entry panels.

- Call from entry panel
- Engages Automatically (direct connection to the entry panel with no incoming call)
- Intercommunication with other terminals, which can be selected from the list of contacts.

It is also set up with all the functions of Bpt's XIP system, such as the video answering service, which records calls from the entry panel).



#### INSTALLATION EXAMPLE

For all of the details on video entry devices, please see the Bpt catalogue.

#### SYSTEM SERVER FOR HOME-AUTOMATION AND VIDEO-INTERCOM ENTRY SYSTEMS



#### CODE: 67100141

#### ID CODE: ETI/DOMO XIP

Besides the functions featured for the ETI/DOMO system server for controlling home-automation modules and connecting to touch-screen terminals via the LAN, it ensures connection via the LAN to video-intercom entry panel by enabling the touch-screen terminals to operate as receivers. The container can be installed in a switchboard on a DIN rail.

Dimensions: 6 DIN modules

N.B.

It integrates six App or GST licenses, for using the XIP Mobile video entry App or terminals with the SIP protocol.

#### **TECHNICAL FEATURES**

	ETI/DOMO XIP	
Power supply (V DC)	12-24	
Consumption at 18 V (mA)	220	
RS422 port	1	
RS485 port	1	
USB port	1	
Ethernet port 10/100Mb	2	
Dimensions (DIN)	6	
Container material	ABS	
Operating temperature (°C)	0 - 35	
Relative operating humidity (%)	93 No condensation	



ACCESSORIES

# ALL YOU NEED TO COMPLETE AND EXPAND THE HOME-AUTOMATION RANGE

To better meet the various system needs we offer a range of accessories that complete and boost our systems.

## **POWER SUPPLY UNITS**

#### SYSTEM POWER-SUPPLY UNIT 20 V DC 600 MA



#### CODE: 67000111

#### ID: OH/A.01

Power-supply voltage 230 V AC, output voltage 20 V. When connected to the home-automation bus it supplies power to all the modules. Set up for connecting to an emergency powersupply unit (24 V DC). V DC).

Dimensions: 6 DIN modules

#### SYSTEM POWER-SUPPLY UNIT 20 V DC 500 MA



#### CODE: 67000601

#### ID: OH/AS

Power-supply voltage 230 V AC, output voltage 20 V. When connected to the home-automation bus it supplies power to all the modules. For connecting two OH/B065 buffer batteries.

Dimensions: 8 DIN modules

#### **RECHARGEABLE 12 V 6.5 AH BATTERY**



#### CODE: 67900501

#### ID: OH/B065

Connecting two to the OH/AS powersupply unit ensures up to 10 hours of power supply to the devices in case of a blackout.

Dimensions: 151 x 101 x 65 mm

## Power-supply units of the BPT video entry range

#### POWER-SUPPLY UNIT 18 V DC 350 MA



#### CODE: 67000701

#### ID: VAS/100MH

Supply voltage 230 VAC, output voltage 18 VDC 350 mA. For powering Mitho-series terminals, the OH/GW system gateway and the ETI/DOMO and ETI/DOMO XIP system server. Used with the OH/PF filter it is for powering the home-automation bus and the connected modules.

#### Dimensions: 3 DIN modules

#### POWER-SUPPLY UNIT 18 V DC 500 MA



#### CODE: 62700011

#### ID: VAS/101

Supply voltage 230 VAC, output voltage 18 VDC 500 mA. For powering Mitho-series terminals, the TS7 terminals, the OH/GW system gateway and the ETI/DOMO and ETI/DOMO XIP system servers. Used with the OH/ PF filter it is for powering the homeautomation bus and the connected modules.

#### Dimensions: 4 DIN modules

#### POWER-SUPPLY UNIT 18 V DC 1.7 A



#### CODE: 62703310

#### ID: VAS/100.30

Power-supply voltage 230 V AC, output voltage 18 V DC 1.7 A. For powering Mitho-series terminals, the TS10 terminals, the OH/GW system gateway and the ETI/DOMO and ETI/ DOMO XIP system servers. Used with the OH/PF filter it is for powering the home-automation bus and the connected modules.

Dimensions: 6 DIN modules

#### HOME-AUTOMATION BUS FILTER



#### CODE: 67000011

#### ID: OH/PF

Lets you connect a generic power supply to the home automation bus and guarantees the correct operation of all the devices. The container can be installed in a switchboard on a DIN rail or built into the bottom of the box. or built into the bottom of the box.

## **ENVIRONMENTAL SENSORS**

#### INDOOR BRIGHTNESS SENSOR WITH 0 - 10 V OUTPUT

#### OUTDOOR BRIGHTNESS SENSOR WITH 0 - 10 V OUTPUT



#### CODE: 67600141

#### ID: OH/SLI

For detecting indoor brightness. The sensor features a built-in green filter for adapting to the sensitivity of the human eye. Power supply 15 - 24 V DC. Absorption 15 mA. Measurable range: 2 kLux, 20 Klux, 100 Klux (adjustable via dip-switch). Precision is +/- 5% of the measurement range. Wall mounting.

Dimensions: 84.5 x 84.5 x 25 mm



#### CODE: 67600151

#### ID: OH/SLE

For detecting the outdoor brightness. The sensor features a built-in green filter for adapting to the sensitivity of the human eye. Power supply 15 - 24 V DC. Absorption 15 mA. Measurable range: 2 kLux, 20 Klux, 100 Klux (adjustable via dip-switch). Precision is +/- 5% of the measurement range. IP65 protection rating. Wall mounting.

Dimensions: 58 x 78 x 45.5 mm

OUTDOOR BRIGHTNESS SENSOR WITH 0 - 10 V OUTPUT AND A MOTION DETECTOR WITH AN NA CONTACT



#### CODE: 67600170

#### ID: OH/SLP

For detecting the brightness in indoor rooms and the presence of any persons via a passive infrared sensor. Power supply 15 - 24 V DC. Current draw 50 mA. Measurable range: 0 - 1 kLux. Accuracy +/- 5° lux. Working temperature -20° C +70° C. Ceiling installed.

Dimensions: diameter 90 mm - height 85 mm

## **ACCESSORIES AND SOFTWARE**

#### SIGNAL REPEATER FOR THE HOME-AUTOMATION BUS

#### HOME-AUTOMATION BUS CABLE

1211	
and a	

#### CODE: 67000401

#### **ID: NH-RBB**

Lets you expand the number of modules connected on a branch of the home automation bus and the distance between the modules and the power supply. Power supply 230 V AC. It is set up for connecting to a 12 V DC or AC backup power supply. V DC or AC backup power supply.

Dimensions: 8 DIN modules



#### CODE: 67900101

#### ID: NH-C1D

For connecting all home-automation modules. Double twisted.

#### SYSTEM PROGRAMMING AND CONFIGURING SOFTWARE



#### **CODE: CAME D SW**

It is for easily and intuitively programming the components of the home-automation system. Download the latest version on the CAME website, or ask our Technical Assistance Service.

#### **PROGRAMMING INTERFACE**



#### CODE: 67900121

ID: IPC/MH

It is for connecting the PC to the home-automation system for programming via the corresponding software

Dimensions: 145 x 85 x 37 mm





## SYSTEM SIZING

# PROPER INSTALLATION, STABILITY AND RELIABILITY

Properly installing the home-automation system, means immediately enjoying the benefits and ensuring a long and efficient life for the system. And that's what makes users happy.

system. And that's what makes users happy. The **CAME DOMOTIC 3.0** was thought up and designed to be easy to install, and simple and straightforward to use. This doesn't mean you have to eliminate or cut back on the indispensable functions of high-level, professional home-automation systems.

By following the simple rules below, you can set up and install the system operate in stable and reliable fashion for a long time. By following the simple rules below, you can set up and install the system operate in stable and reliable fashion for a long time.

## LENGTHS AND BRANCHINGS OF THE BUS CABLE

## **Topology of connections**

Properly installing the home-automation module means not only obtaining immediate benefits, but also ensuring a long an efficient life to the system, which translates into satisfied users.

The **CAME DOMOTIC 3.0** home-automation system is conceived and designed to be easy to install and at the same time simple and intuitive to users, without needing to eliminate or reduce the typical functions of a high-level professional home-automation system. By following the simple indications below, when setting up and installing, you can obtain a system with stable and reliable performance over time.

The main types of connections are use: star connection, tree connection and bus connection.



In the context of these connections you can manage them in the most suitable way depending on the various systems' needs.

## The bus cable

We strongly suggest using the NH-C1D system cable, which features the following characteristics.



#### **General features:**

Outer diameter: 5 mm Insulation type: PVC Characteristics of the conductors: double twisted Conductors section: 0.38 mm Electrical resistance of the conductors: 51 ohms/km Nominal impedance of the conductors: 100 ohms Capacity of the conductors: 66 pF/m Insulation current: 300/300 V Packaging: 00 meter bundle Regulatory standards: CEI 20-11 - CEI 20-35 - CEI 20-20 - CEI 20-29

## Length of the branchings and maximum number of devices

In the basic configuration, obtainable by using the ETI/DOMO system server or the OH/SER interface, you can install a system branch, as shown in the figure, with up to 500 meters of cable extension and up to 40 devices. The branch must be powered via the corresponding OH/A.01 power-supply unit.

By using the NH-RBB signal repeater the branch can be doubled with an additional 40 devices over 500 meters of cable.

In both cases the maximum distance between the power-supply unit and any one of the modules must be 100 meters, at most.

## INSTALLATION EXAMPLE



The system can be expanded with additional system branches. In this case each branch must be controlled by an OH/GW system gateway and fitted with a power-supply unit. The set of OH/GWs enables the proper flow of data among the various branches of the system. the various OH/GW devices are connected among themselves via the MultiMaster bus.

## INSTALLATION EXAMPLE



Otherwise, you can expand the system by connecting several system servers over the LAN. Thanks to the two Ethernet ports featured on the ETI/DOMO, various system branches, each coming under their corresponding OH/SER, can be connected among themselves over the LAN and therefore exploit the speed of transmission and characteristic extensions of such a network.

### INSTALLATION EXAMPLE



## LEGEND TYPES OF CONNECTIONS SHOWN IN THE DIAGRAMS

	LAN
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Home-automation bus
000000000000000000000000000000000000000	MultiMaster (MM) bus
	One, two-wire bus
	Dali bus
	DMX bus
	CAME CRP (RS485) operators bus
	RS422 line
	Standard device-connection
	230 V AC
<b>←</b>	Wi-Fi connection
4 Þ	connection over radio-frequency

## CODE AND ID

Each product is marked with a CODE and by an ID. When ordering, please state the CODE for each product.

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