Home automation catalogue

NEHOS

Interactive multimedia home automation system

bpt

H⌂ME
SAPIENS

The easiest way to discover home automation is with BPT.

bpt

NEH⌂S

The hustle and bustle of everyday life and the increased amount of time spent outside the home often leads to a need for more convenience and safety, for user-friendly technology, that helps simplify life. And so we have a new concept of comfort: not just physical, but emotional as well.
HOMESAPIENS is the answer to these needs .

With Nehos , the design of a truly smart and interactive building is within everyone's reach. Ease of use and attention to detail and leading the industry to meet new challenges have always been part of Bpt's philosophy.

HOME
SAPIENS

Home automation made easy where the future is now.

remote control

digital terrestrial televisi

telephone on Internet

e-mail

streaming video

telephone on Internet

internet browsing

NEHOS
17 Maggio 2005 15:03   19.0°C
Lisa
bpt

technical alarms

automation

lighting

heating control

video entry control

scenari

intruder alarm

cctv

timer

automation

management of electrical loads

scenari

management of electrical

heating control

automation

irrigation

lighting

telephone

timer

technical alarms

heating control

intruder alarm

er

automation

cctv

management of electrical loads

intruder alarm

HOME/BUILDING AUTOMATION

video entry control

heating control

heating control

4   bpt

NEHOS
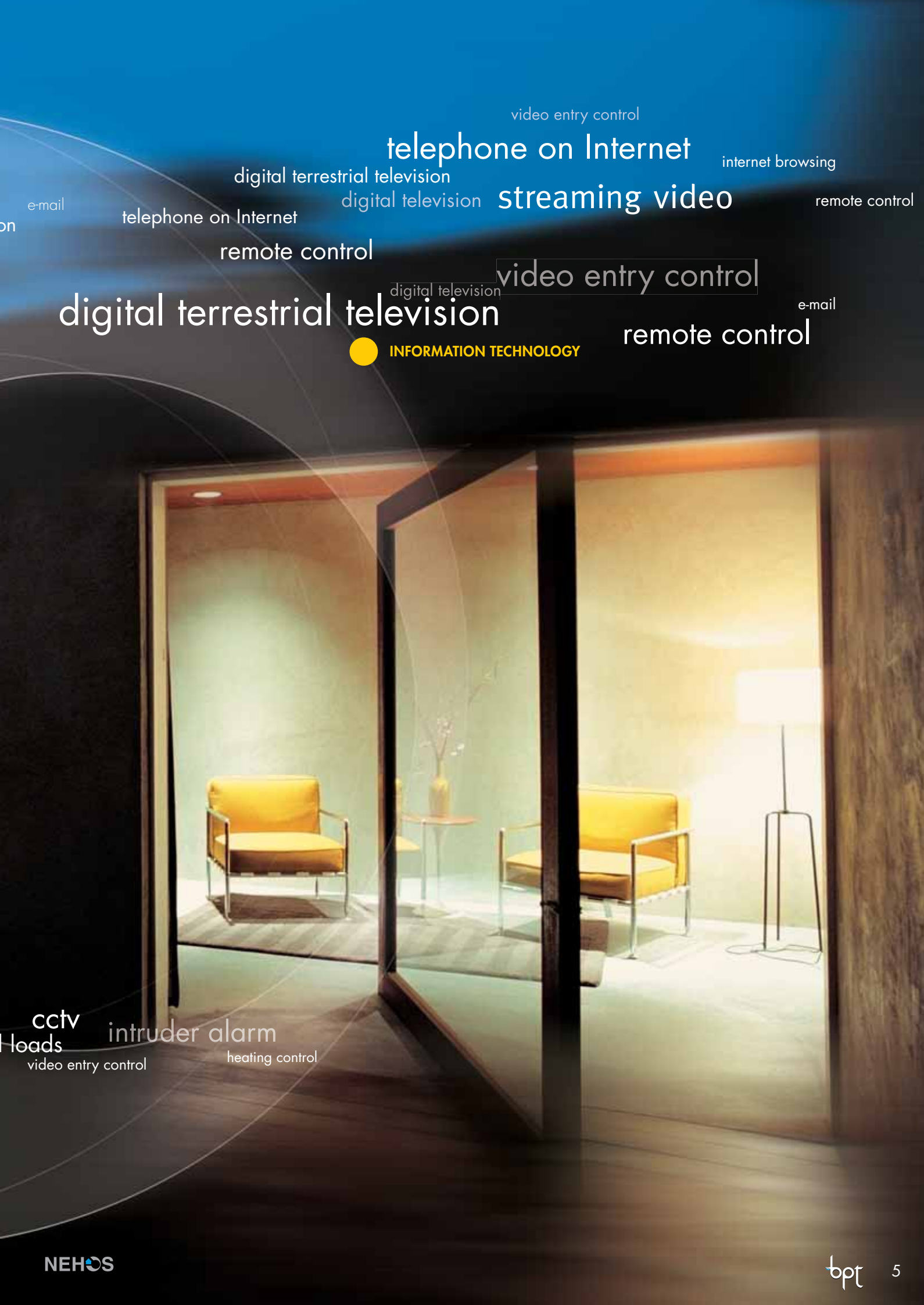
video entry control

telephone on Internet

internet browsing

digital terrestrial television

e-mail

digital television

streaming video

remote control

on

telephone on Internet

remote control

video entry control

digital television

e-mail

digital terrestrial television
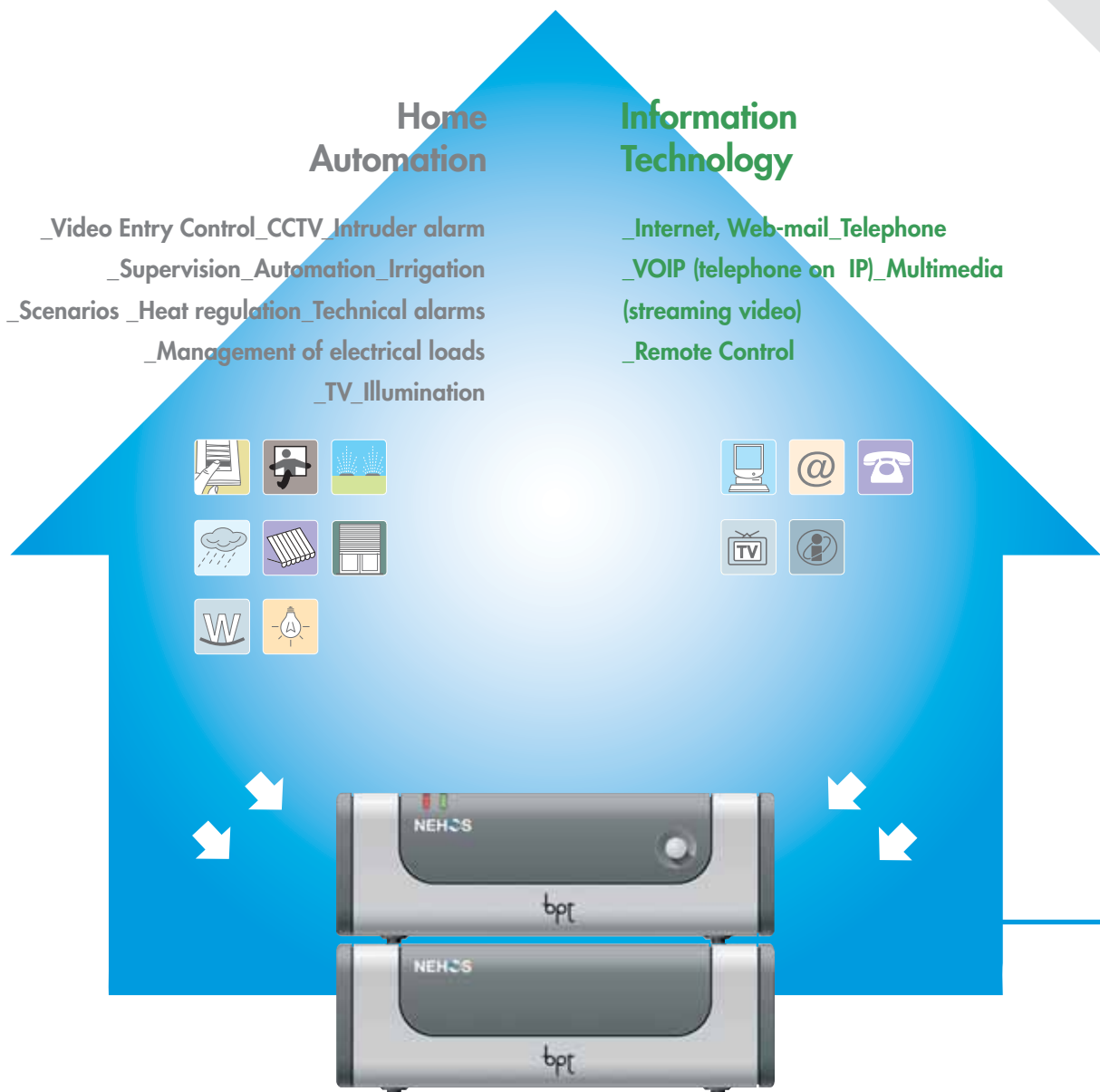
remote control

● **INFORMATION TECHNOLOGY**

cctv

loads

intruder alarm

video entry control

heating control

NEHOS
A bridge between home automation and information technology.

Home Automation

_Video Entry Control_CCTV_Intruder alarm
_Supervision_Automation_Irrigation
_Scenarios _Heat regulation_Technical alarms
_Management of electrical loads
_TV_Illumination

Information Technology

_Internet, Web-mail_Telephone
_VOIP (telephone on IP)_Multimedia
(streaming video)
_Remote Control

bpt

NEHOS

Access the Internet, read and write e-mail, answer the door or the telephone, watch a movie. Or monitor every single light, every shutter… That's the idea behind the Nehos project: to make home automation not just automation, but especially entertainment and safety. A technological bridge that connects the world of home and telecommunications, with new services that are ready for use, such as telephone on the web (VOIP–Voice Over IP) and watching video and events (VOD–Video On Demand). Nehos is a portable touch screen terminal equipped with a simple and intuitive interface, that can go anywhere, thanks to its ability to operate in wireless mode. Safety is also avant-garde. In fact you can control the intruder alarm and the surveillance system cameras, also remotely, , by connecting to your home through the portal created by Bpt.

NEHOS

Automation swings into action.

COMFORT

Lights: _general lighting control, by area, room or single point
_management of dimmer switches for lights
Air conditioning: _weekly temperature control for each zone with 3 different levels
Openings: _control of automation by type (shutters, windows, curtains), by zone and by single automation

SAVINGS

Loads: _selection of operating priorities for each load on three levels (high/medium/low).
_management of controls on electrical mains

SAFETY

Cctv: _connection and live viewing of up to 64 cameras
_zoom and slewing control and also dome camera
Security: _display of status for each zone, for each room or for each single sensor
_alarm on event and forwarding of signal to remote location
Technical alarms: _management of technical alarms (water, gas, etc.) with reporting of events and signalling to remote location

SCENARIOS

Scenarios: _intuitive icons for each scenario
_display of activations contained in each scenario
_customizable timed scenarios

TIMER

Lights: _timed control for any hour of the day or for any day of the week
Irrigation: _max 2 activations for each day of the week

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NEHOS

NEHOS

Comfort ☺

Savings

Security 🔒

Scenarios

video entry   phone   TV

NEHOS
Entertainment functions.

VIDEO ENTRY CONTROL
_The Nehos terminal can be used to answer video entry control system calls, to control the door lock release,
to turn on the stairwell lights and to use other electrical services.
_If there is no call, it is possible to have self-insertion and cyclical selection
of the video entry control panels.
_Intercommunication is possible between intercommunicating video entry control extensions.

STANDARD TELEPHONE AND VOIP
_From the Nehos terminal, it is possible to make and to receive phone calls
via the traditional PSTN phone lines.
_Using a normal PABX, the terminal is also able to intercommunicate
with traditional telephones located in the home. .
_You can also manage Internet telephone communications
(VOIP Voice Over IP) offered by telephone service providers.

INTERNET BROWSING AND E-MAIL
_From the terminal, only by pressing a key, immediate Internet access is obtained.
_You can also access your e-mail account, and write and send e-mails and SMS messages.
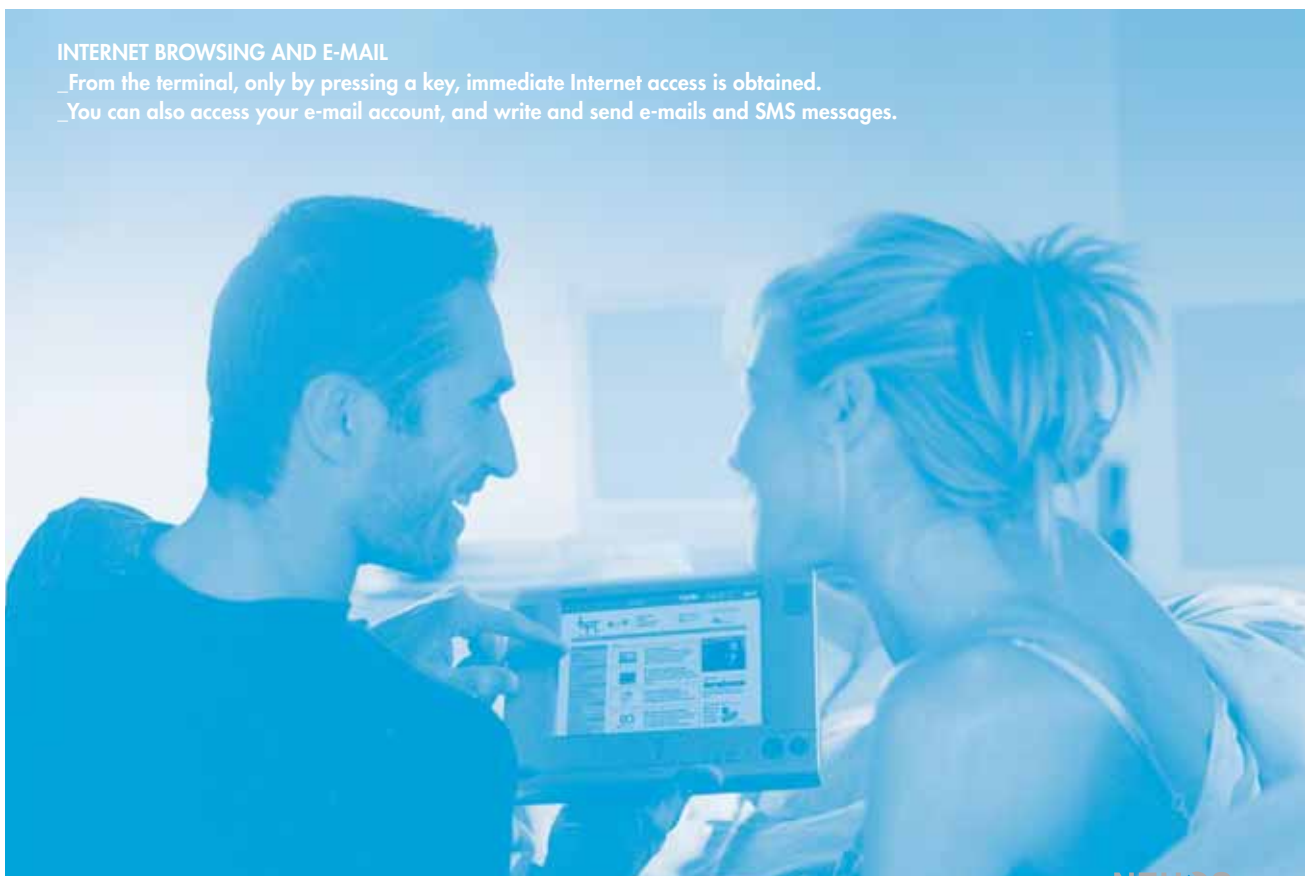
NEHOS

REMOTE MANAGEMENT
_Using a special port, you will be able to remotely manage enabling form a normal PC;
where the same graphic interface will be reproduced as on the Nehos terminal,
offering you the opportunity to access all available applications.
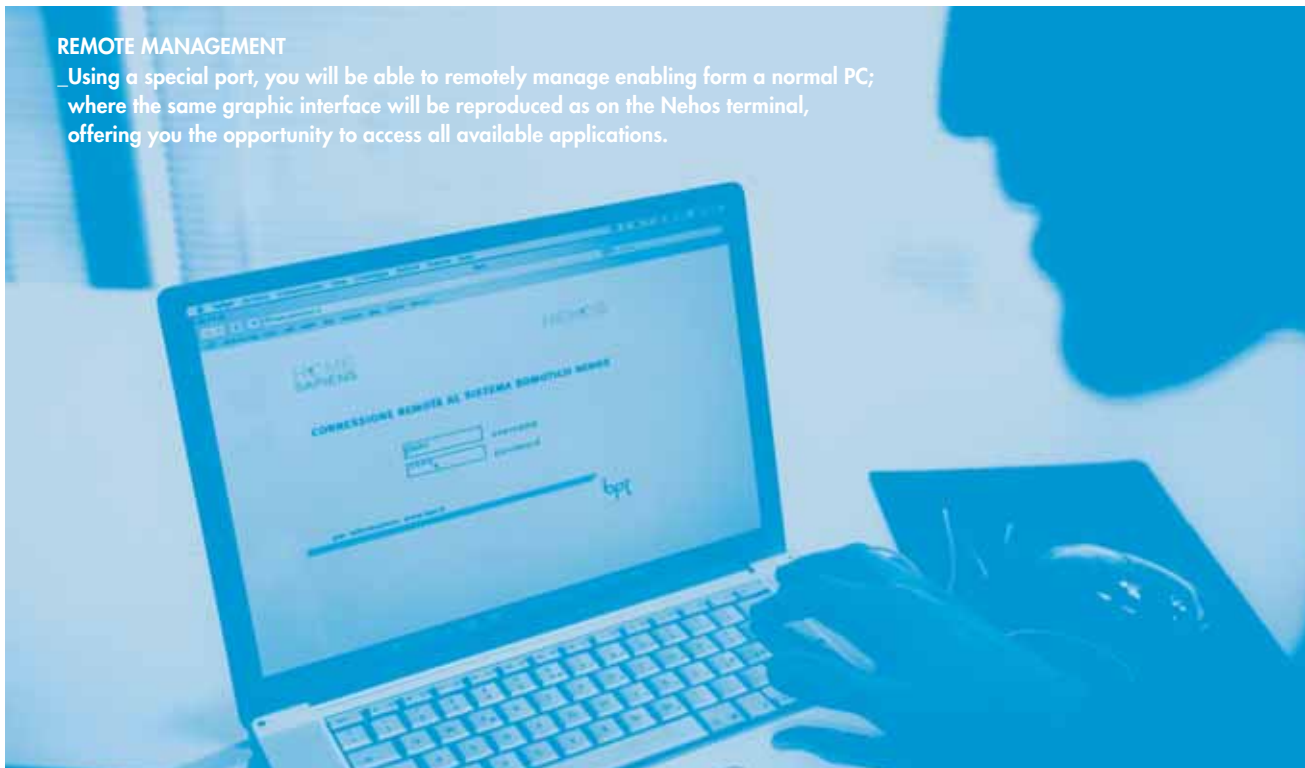
TV AND VIDEO ON DEMAND
_From the Nehos terminal you can watch TV, change channels, and adjust the volume, brightness, etc.
_The system allows entertainment management by means of VOD – Video On Demand (this function
is contingent upon the availability of operators to provide the service)

NEHOS

NEH⌂S

The infrastructure.
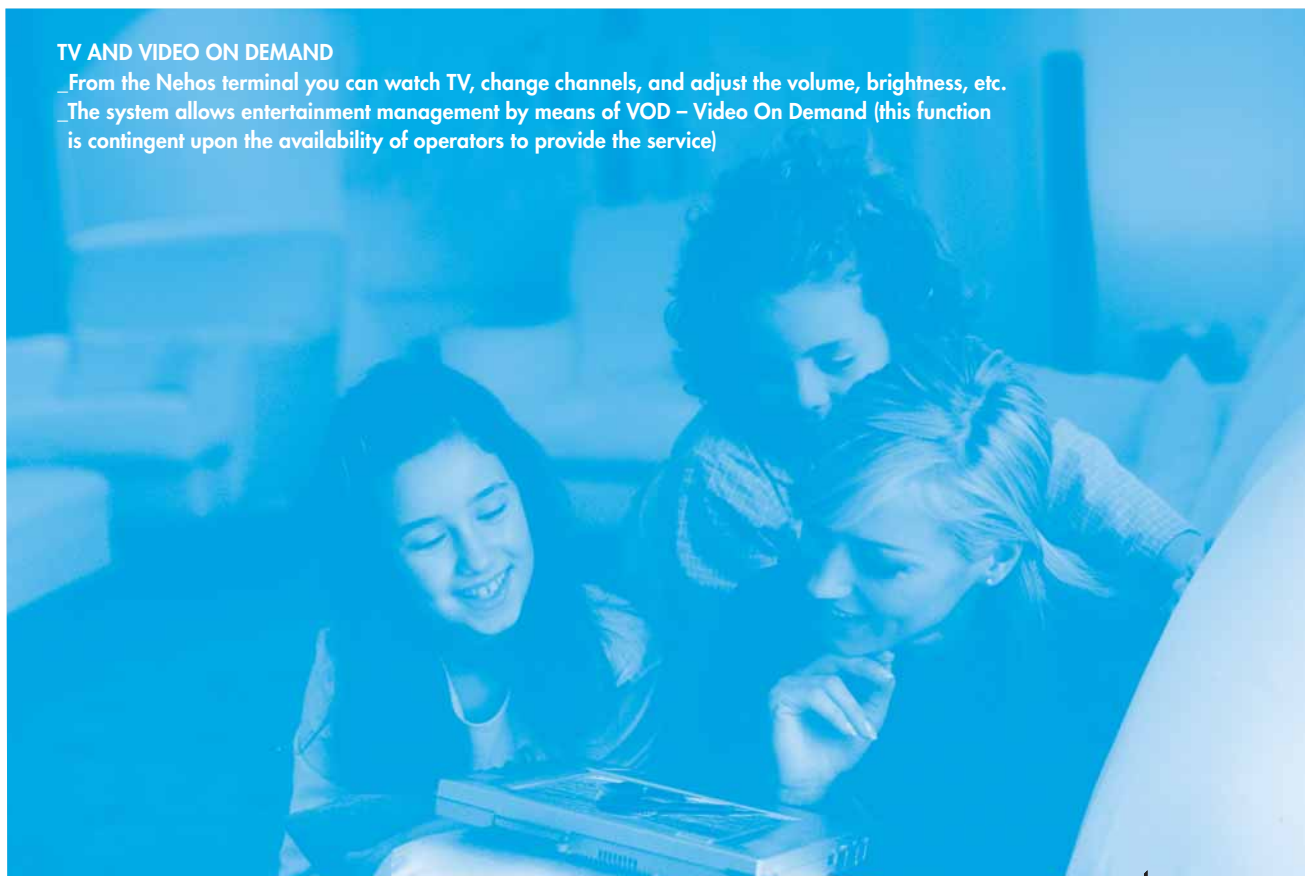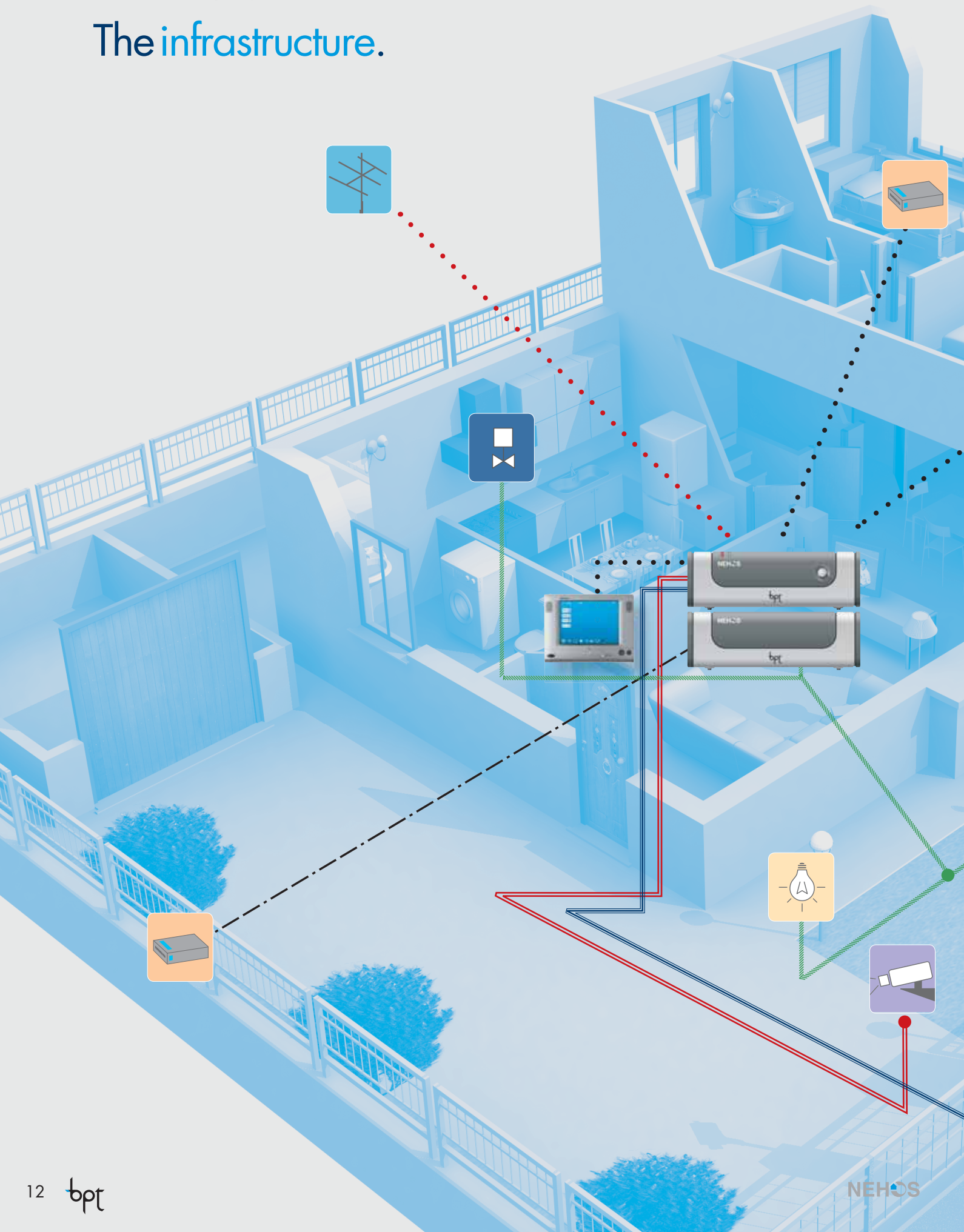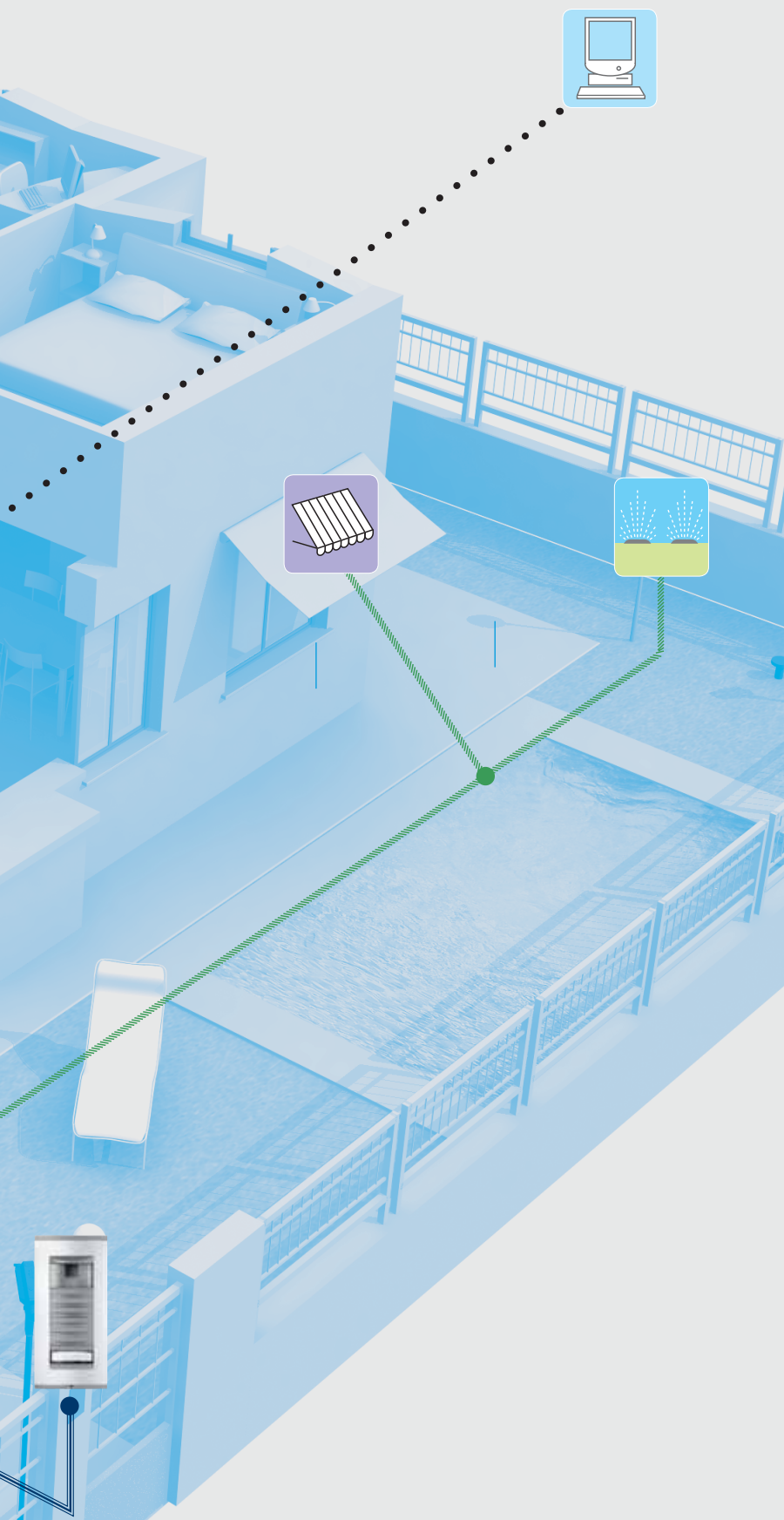
ADSL telephone

LAN (UTP5 cable)

antenna (coaxial cable)

Cctv (coaxial cable)

Video entry control (twisted pair)

Bus (twisted pair)

NEHOS
The system by the numbers.

How to make the most of its potential.

Characteristics for each bus card used*

Max **40** devices

Max **240** controls

Max **160** activations

Max distance **100** m between bus card/interface modules

Max distance **20** m between control device/interface modules

Maximum **500** m of laid cable

Devices which can be connected are: OH/6I - OH/RI - OH/RP - OH/Z.02 - OH/R.01 - OH/MA - OH/3RPI - NH-DIM. As a result, the number of controls and activations that can be created is contingent upon the number and combination of devices used
* Up to 5 cards can be managed for each system

Common characteristics in the system

Max **100** thermic areas

Max **20** irrigation areas/timers

Max **5** terminals

Max **18** scenarios

bpt

NEHOS

The components.

NH-T
Home automation control terminal
PRODUCT CODE: 6720-0400

Lets you monitor and control all electrical applications in the system. It also includes entertainment functions (TV viewing and video on demand-VOD, browsing the Internet and e-mail, PSTN and VOIP telephone, video entry control, etc.).

NH-KW
Wireless kit
PRODUCT CODE: 6720-0900

Installed in the NH-T home automation terminal, it allows transmission of data from a remote location to the NH-BC core unit (via NH-AP access point). It is composed of a PCMCIA WiFi card and a Ni-Mh battery.

Card characteristics
Data transmission speed: 11 Mbps.
Frequency band: 2.4 GHz.
Maximum transmission distance: 100 m through open air.
Battery characteristics
Nominal voltage: 12 Vcc. - **Capacity:** 2,1 Ah.

NH-KIR
Wireless keyboard
PRODUCT CODE: 6720-1000

It is normally used for more convenient access to Internet and to send and write e-mails, as an alternative to the virtual keyboard on the terminal.

General characteristics
No. of keys: 85. - **Data transmission:** IRDA.
Transmission distance: < 5 m.
Power supply: 2 alkaline batteries type AA da 1,5 V.
Dimensions: 86x75x25 mm.

NH-ST
Tabletop support
PRODUCT CODE: 6720-0600

It is used to set the terminal on a tabletop.

General characteristics
Connections: one 2.5 mm jack for plug power supplier connection (NH-AS) - one RJ45 connector for LAN connection.
Dimensions: 280x145x215 mm.

NH-SC
Receiver with support
PRODUCT CODE: 6720-0700

General characteristics
Connections: connection to terminal with snap-in connector.
Dimensions: 80x210,5x60 mm.

General characteristics
Display da 8,4" a colori TFT touch-screen
Dimensions: 260x200x32 mm
Standard equipment: 1 input pen - 1 plug power supplier (NH-AS
Optional equipment: Wall kit - table kit
Wireless kit (battery NI-MH of 1900 mAH, card PCMCIA WIFI)

NH-AD
Power supplier
PRODUCT CODE: 6700-0300

This is used to supply the NH-T home automation terminal in the wall-mounted version.

Technical features
Power supply: 230V AC 50/60. The transformer is electronically protected against overloads and short circuits.
Output voltage: 20 Vcc +/- 5%.
Maximum output current: 2A.
Absorbed power: 80VA max.
Dimensions: low-profile 4-unit module for installation on DIN rail.

NH-SP
Wall-mounted support
PRODUCT CODE: 6720-0500

This is used to fasten the terminal to the wall. For a terminal in a WIFI version, the bracket is also used as a battery charger.

General characteristics
Connection: 2 terminals for power supply connection (from NH-AD power supplier) -one RJ45 connector for LAN connection.
Dimensions: 220x150x22 mm.

NH-AS
Plug-in power supply
PRODUCT CODE: 6700-0200

This is used to power and recharge the batteries of the terminal when using the WIFI version. Remember that the terminal is already equipped with one NH-AS.

General characteristics
Power supply: 230 Vac 50/60 Hz.
Output voltage: 18 Vcc 2,2A.
Electrical input: 80 VA.
Operating temperature: from 0° C to 35° C.
Dimensions: 117x65x32 mm.
Output: 2.5 mm jack with internal positive and 1.8 m cable

NH-BC
Core unit
PRODUCT CODE: 6710-0100

This manages all media originating from external sources: telephone line, coaxial cable from TV system, twisted pair of the video entry control system, and LAN. It then shunts all signals to the terminal. The connection to the terminal, with IP protocol, can be made with either Ethernet or WIFI.

General characteristics
Power supply: 230 Vac 50/60 Hz   150 W
Dimensions: 308x220x105mm

NH-BI
Bus interface unit
PRODUCT CODE: 6710-0200

This manages all automation devices in the home.
A communication bus is used between the various devices via two media: on a normal non-polarized twisted pair with free wiring, or on a dedicated electrical mains line via carried waves (bus power line).

General characteristics
Power supply: 230 Vac 50/60 Hz   150 W
Dimensions: 308x220x105mm

NH-BIBB
Bpt bus card
PRODUCT CODE: 6710-0300

Installed in the NH-BI unit, it makes it possible to manage all input and output interface units by means of a non-polarized twisted pair and to manage all their operating parameters.

General characteristics
Maximum number of devices that can be connected: 40
Connections: 2 terminals for connection of the twisted pair

NH-BIPL
Power line bus card
PRODUCT CODE: 6710-0500

Installed in the NH-BI unit, it makes it possible to manage all input and output interface units by means of direct connection via the 230 V AC electrical mains. It is normally used for control with priority of disconnection of the electrical loads connected to the system.

General characteristics
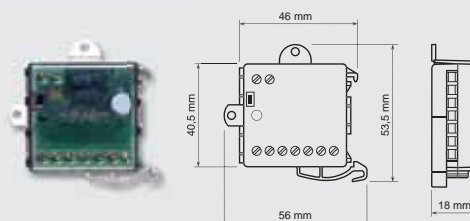**Maximum number of devices that can be connected:** 40

OH/6I
6 input module
PRODUCT CODE: 6760-0200

It allows connection of 6 inputs from control devices (buttons, sensors, etc.)

46 mm
40,5 mm
53,5 mm
56 mm
18 mm

General characteristics
Type of contact input: NO and NC, without cross passage of current or voltage at ends
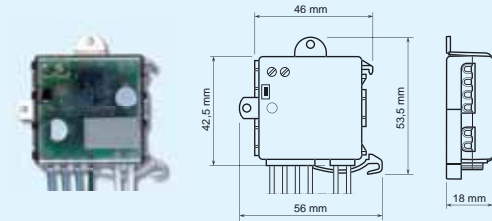**Dimensions:** low-profile 1-unit module for installation on DIN rail

OH/RI
Module 1 relay 3 inputs
PRODUCT CODE: 6760-0300

It allows connection of 3 inputs from control devices (buttons, sensors, etc.) and 1 output per electrical load.

General characteristics

Type of contact input: NO and NC, without cross passage of current or voltage at ends

No. of relays: 1

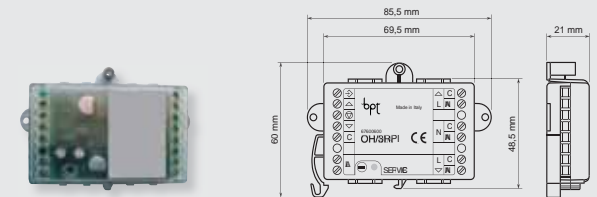**Type of relay:** 2250 V max, 5A max with resistive load (2A max with inductive load) - contact NO

Dimensions: low-profile 1-unit module for installation on DIN rail

OH/3RPI
Module 3 relays 3 inputs
PRODUCT CODE: 6760-0700

Allows connection of 3 inputs from control devices (buttons, sensors, etc.) and 3 outputs for electrical loads.

General characteristics

Type of contact input: NO and NC, without cross passage of current or voltage at ends

No. of relays: 3

Type of relay: 250 V max, 16A max with resistive load (5A max with inductive load) - contact NO

Dimensions: low-profile 1-unit module for installation on DIN rail

OH/R.01
Module 4 relays 4 inputs
PRODUCT CODE: 6760-0110

Allows connection of 4 inputs from control devices (buttons, sensors, etc.) and 4 outputs for that number of electrical loads

General characteristics

Type of contact input: NO and NC, without cross passage of current or voltage at ends
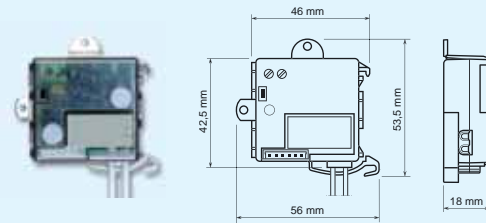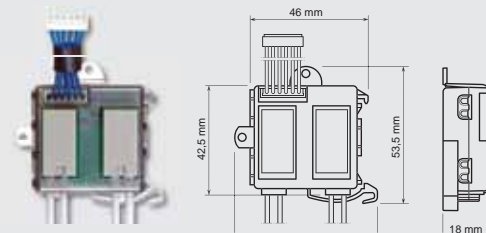
No. of relays: 4

Type of relay: 250 V max, 5A max with resistive load (2A max with inductive load) - switched contacts (C NC NO)

Dimensions: low-profile 6-unit module for installation on DIN rail

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OH/RP
Module 1 relay
PRODUCT CODE: 6760-0400

It includes one output for one electrical load.

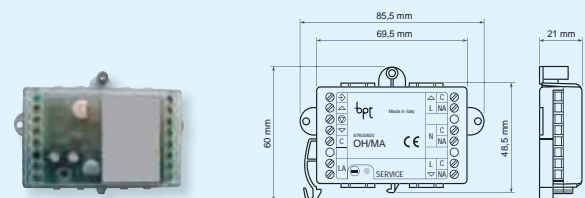**General characteristics**
No. of relays: 1
Type of relay: 250 V max, 16A max with resistive load
(5A max with inductive load) - contact NO
Dimensions: low-profile 1-unit module for installation on DIN rail

OH/2RP
Expansion module 2 relays
PRODUCT CODE: 6760-0500

With 2 outputs for the same number of electrical loads. It must always be used in conjunction with the OH/RP module, for which it is an expansion. It is equipped with a wire with a snap-in connector for connection to the OH/RP module.

General characteristics
No. of relays: 2
Type of relay: 250 V max, 16A max with resistive load
(5A max with inductive load) - contact NO
Dimensions: low-profile 1-unit module for installation on DIN rail

OH/MA
Automation module
PRODUCT CODE: 6760-0600

Includes 3 power relays for management of automations (curtains, shutters, etc.) via relative local control buttons. It allows control of outputs via 3 local inputs (up, down, stop) with human presence detector and with window function (raising and lowering of blind for an adjustable length of time). The device also makes it possible to separate the neutral and the two phases of the power supply of the motors corresponding to the connected automation.

General characteristics
Type of contact input: NO and NC, without cross passage of current or voltage at ends
No. of relays: 3
Type of relay: 250 V max, 16A max with resistive load
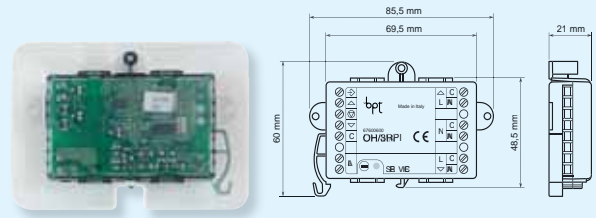(5A max with inductive load) - contact NO
Dimensions: low-profile 1-unit module for installation on DIN rail

NH-DIM
Dimmer interface module
PRODUCT CODE: 6760-0800

85,5 mm
69,5 mm
21 mm
60 mm
48,5 mm

It is equipped with 1 relay and a 1÷10V DC output, with which it is possible to control a dimmer with a 1÷10V DC input for neon or incandescent lamps.

Technical features
Power supply: from bus line.
Actuator with relay for 16A DIMMER input or incandescent lamps, 5A for inductive loads, fluorescent lamps or ferromagnetic transformers
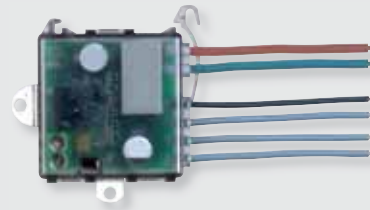**Dimensions:** low-profile 1-unit module for installation on DIN rail.

NH-IPL
Load management module
PRODUCT CODE: 6760-0900

Via the power line (230V AC) it receives commands from the inter-face bus, and is able to activate/de-activate the internal relay. It can be installed in normal recessed boxes.

General characteristics
No. of relays: 1
Type of relay: 250 V max, 6 A max with resistive load
(5 A max with inductive load) – contact (C-NC-NO)
Dimensions: low-profile 2-unit module for installation on DIN rail

NH-DPL
Module for management of power line loads with 4 relays
PRODUCT CODE: 6760-1000

Via the power line (230V AC) it receives commands from the inter-face bus, and is able to activate/de-activate the internal relays. It is to be installed on a DIN rail, allowing perfect star management of electrical loads.

General characteristics
No. of relays: 4
Type of relay: 250 V max, 10A max with resistive load
(5A max with inductive load) - contact (C-NC-NO)
Dimensions: low-profile 6-unit module for installation on DIN rail

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NH-MPL
Measuring device of power line current
PRODUCT CODE: 6760-1100

This lets you measure the absorbed current in an electrical system via an internal amperometric transformer for the management of connected electrical loads. The maximum power the instrument can record is 6 Kw.

Technical features
Range of current read: 0,1-32 A.
**Power supply: from electrical line:** 230Vca, 50Hz.
Dimensions: low-profile 6-unit module for installation on DIN rai

OH/Z.02
Module for area temperature control
PRODUCT CODE: 6720-0220

This lets you control the temperature of the zone in which it is located. You can select the operating mode (automatic/manual), modify the room temperature by a maximum of +/- 2°C or to override the temperature control for the corresponding zone.
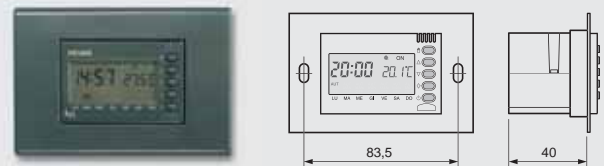
General characteristics
Display: LCD graphic
Operating temperature: from 0 °C to +40 °C
Dimensions: standard 3-module recessed box
Operating mode: manual, Automatic, Zone Bypass
Anti-freeze temperature: +8°C

NH-SWE8
Ethernet switch 8 ports
PRODUCT CODE: 6730-0400

This is used for distribution of the LAN throughout the building.

General characteristics
No. of ports: 8
Characteristics of ports: Ethernet 10/100
Operating temperature: from 0 °C to +40 °C
Power supply: 12 V DC 1 A from plug-in power supplier (included)

NH-SWE16
Ethernet switch 16 ports
PRODUCT CODE: 6730-0500

This is used for distribution of the LAN throughout the building.

General characteristics
No. of ports: 16
Characteristics of ports: Ethernet 10/100
Operating temperature: da 0° C a 40° C
Power supply: 12 V DC 1 A from plug-in power supplier (included

NH-MV
Modem voice PSTN
PRODUCT CODE: 6730-0300

This is used to manage telephone functions (audio, services) from the terminal.

Technical features
Operating standard: V.90/V.92 - 56Kbps in data reception/transmission
Connections: RJ11 connectors
Power supply: 9 V DC 800 mA from plug-in power supplier (included)
Operating temperature: from 0 °C to +55 °C.

NH-RSW
ADSL router with Ethernet switch 4 ports
PRODUCT CODE: 6730-0200

This is used to connect the system to the Internet.

Technical features
Operating standard: ADSL.
Connections: Four RJ45 connectors - One RJ11 connector.
Power supply: 12 V DC 1.2 A from plug-in power supplier (included).
Operating temperature: from 0 °C to +40 °C.

NH-AP
Wi-Fi access point
PRODUCT CODE: 6730-0600

This is used for transmission of the signal on the WIFI LAN to and from the terminal.

Technical features
Operating standard: 802.11 b/g.
Connections: RJ45 connectors.
Operating distance: < 100 m indoors.
Operating temperature: from 0 °C to +55 °C.

NH-RBB
Bpt bus repeater
PRODUCT CODE: 6700-0400

The data line repeater connects to the BPT home automation BUS and is used when the maximum distance between devices and power supplier is exceeded, when the maximum amount of laid cable is exceeded or when the maximum number of devices for the system is exceeded. The unit is set up for connection to an emergency power supply (12 V AC, DC).

Technical features
Power supply: 230V 50/60 Hz electronically protected
Electrical input: 24 VA.
Emergency power supply: 12 V DC - AC, 1 A.
Operating temperature: from 0 °C to +35 °C.
Dimensions: low-profile 8-unit module for installation on DIN rail.

NH-C1D
Bpt bus cable
PRODUCT CODE: 6790-0100

This is used for the connection of all input/output devices that make up the system.

General characteristics
External diameter: 5 mm
Type of sheath: PVC
Characteristics of wires: twisted pair
Cross-section : 0,38 mm
Resistance of electrical wires: 51 ohms/km
Nominal impedance of wires: 100 ohms
Capacity of wires: 66 pF/m
Isolation voltage: 300/300 V
Package: skein 100 m
Applicable standards: CEI 20-11 - CEI 20-35 - CEI 20-20 - CEI 20-29

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NEHOS

NH-PCN
Nehos PC software
PRODUCT CODE: 6790-0200

This is used for programming and personalizing all system devices and parameters, and also to create and personalize the operational graphic interface of the terminal.

Technical features
Minimum system requirements: PC Pentium III 700 MHz or higher, 128 MB RAM, 40 MB of space on HD, XGA video, Windows 98SE/ME/2000/XP operating system.
Package: software CD, 64 MB pen drive, LAN RJ45 network cable.

NH-UPS
Backup power supply
PRODUCT CODE: 6700-0500

This is used to provide power only to the devices that make up the BPT home automation system in the event of a power outage.

Technical features
Capacity: 1000 V A.
Range of mains voltage: 160-275 V AC.
Frequency: 50 Hz +/- 5%.
Type UPS: single phase.
Power factor: ≤ 0.95 at full load.
Battery voltage: 36 V DC.
Voltage: 230 V AC +/- 2%.
Frequency: 50 Hz +/- 0.5%.
Wave form: sinusoidal THD < 3%.
Output sockets: two shuko output sockets.
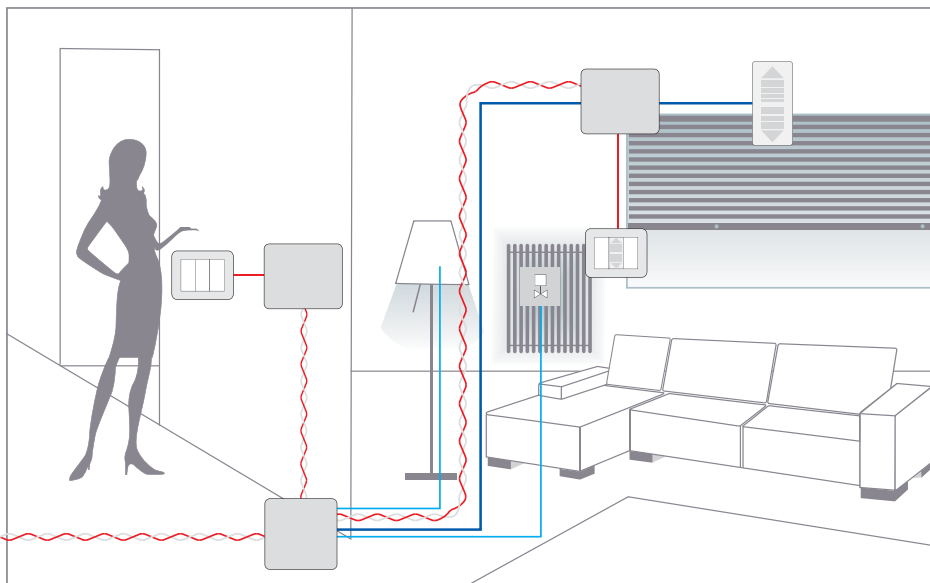**Dimensions:** 161x470x280 mm.
Weight: 18 Kg.

NEHOS

Examples of standard scenarios.
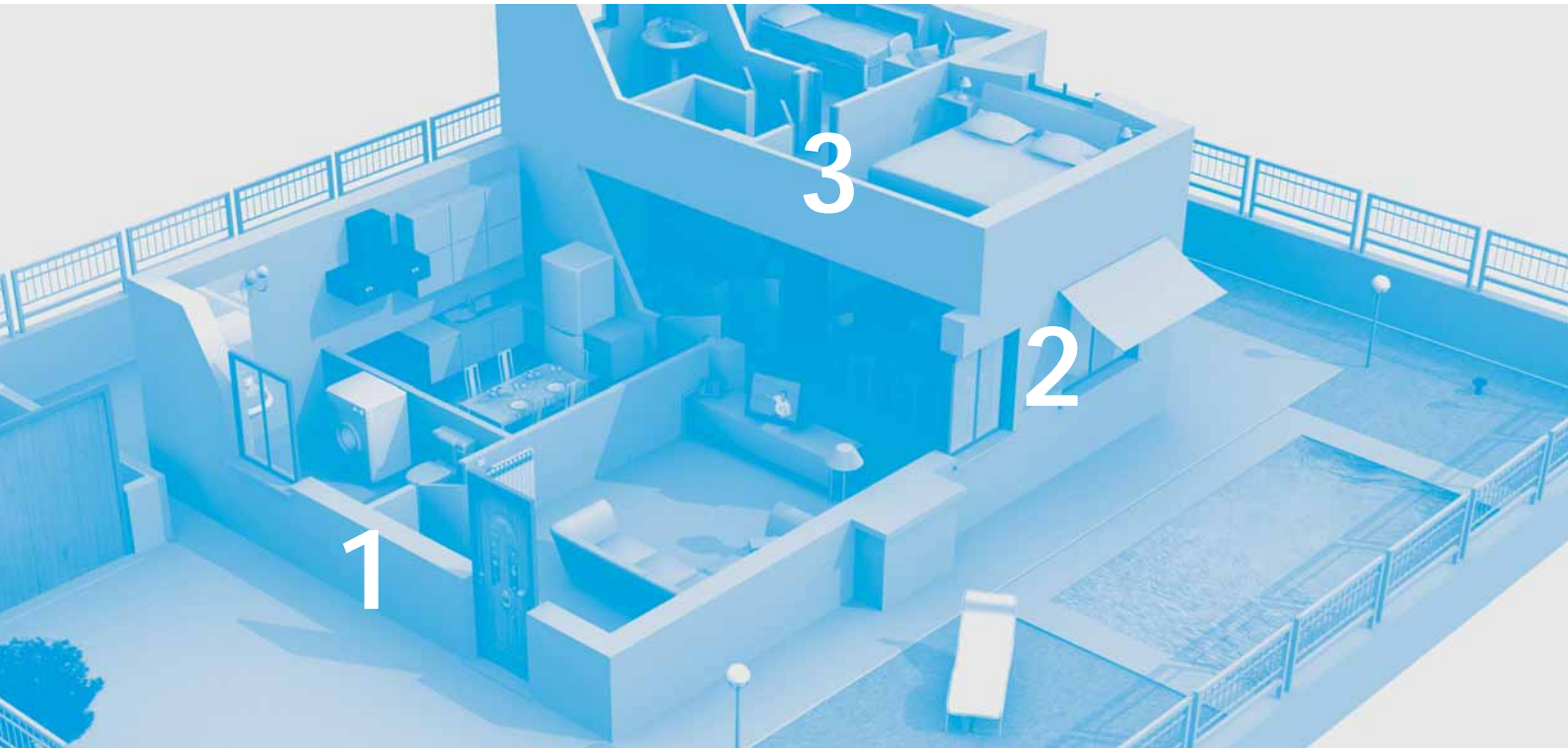
ENTER scenario.

- Controls
- BPT bus
- Electrical loads
- F. M. line

UP/DOWN

SHUTTERS

SOLENOID VALVE

LIGHTING

A possible application:
- The blinds activate one at a time, moving to reach the desired height;
  the desired heights of the blinds can be programmed using the timer*.
- The lights come on in the desired areas

* N.B. The use of shutters requires them to be equipped with a protection device. Ensure that the system is equipped with automatic limit switches and/or a detection and stopping system in case of obstacles.

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NEHOS

Irrigation scenario.

TIMER

BAROMETER STATION

SOLENOID VALVE

ON/OFF

Controls
BPT bus
Electrical loads
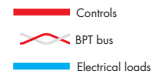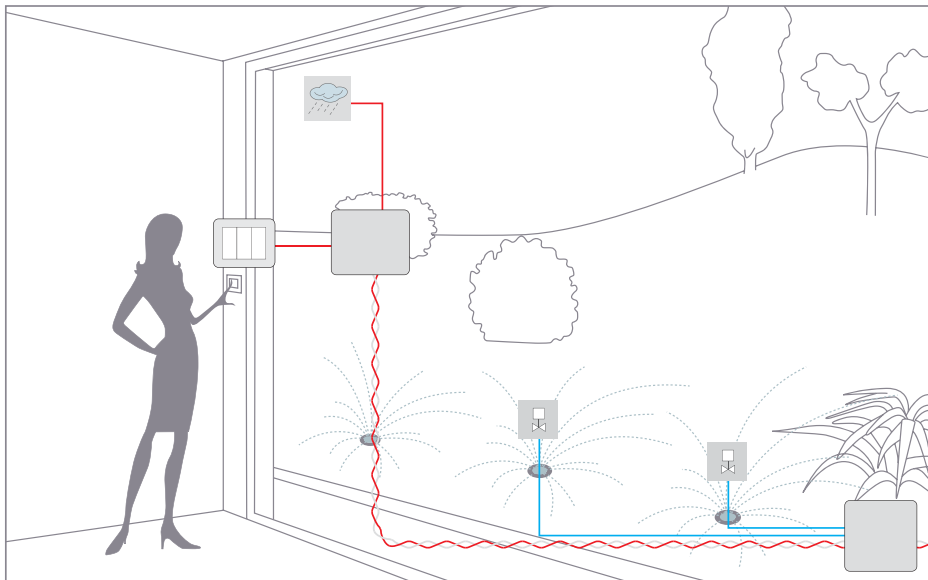
With this configuration you can:
- Automatically activate irrigation at scheduled times
- Control the scenario from the main on/off button or from the scenario button
- De-activate the function automatically in the event of inclement weather
  by the use of a barometer station

Night scenario.

UP/DOWN

SHUTTERS

INTRUDER ALARM

LIGHTING

Controls
BPT bus
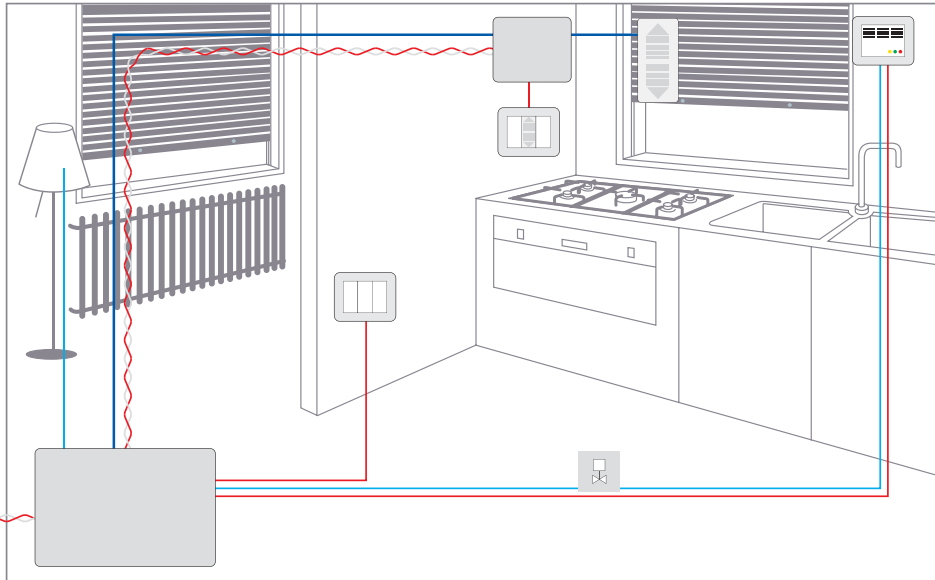Electrical loads
F. M. line
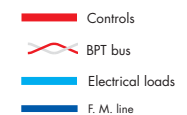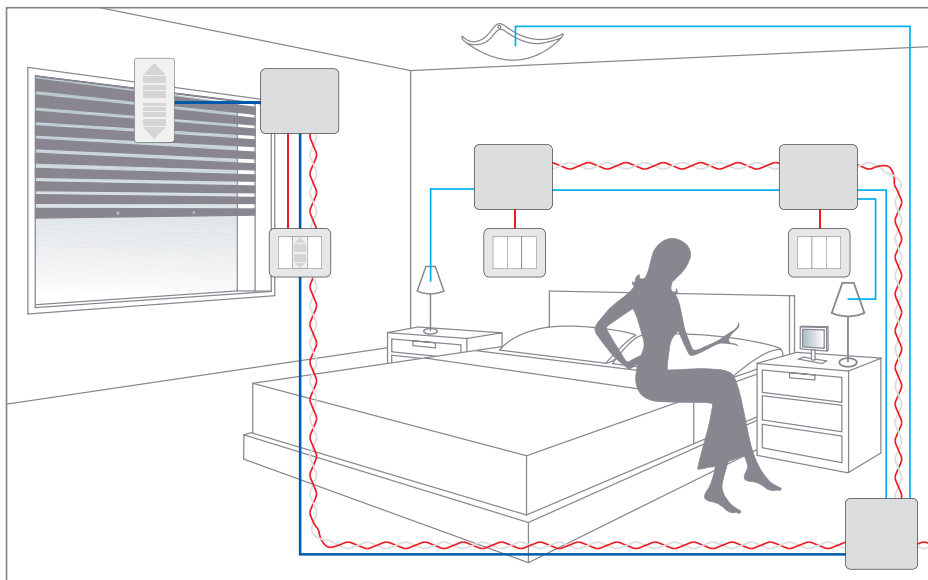
A possible application:
- Closing of blinds
- All lights turned off
- Activation of intruder alarm in night zone
- Scenario control from push button or terminal controls

* N.B. The use of shutters requires them to be equipped with a protection device. Ensure that the system is equipped with automatic limit switches and/or a detection and stopping system in case of obstacles

EXIT scenario.

4

Controls
BPT bus
Electrical loads
F. M. line

A possible application:
- The shutters close one at a time.
- The lights go off in sequence.
- Zone valves for water and gas are closed

* N.B. The use of shutters requires them to be equipped with a protection device. Ensure that the system is equipped with automatic limit switches and/or a detection and stopping system in case of obstacles.

UP/DOWN

SHUTTERS

SOLENOID VALVE

LIGHTING

Curtain scenario.

5

Controls
BPT bus
F. M. line
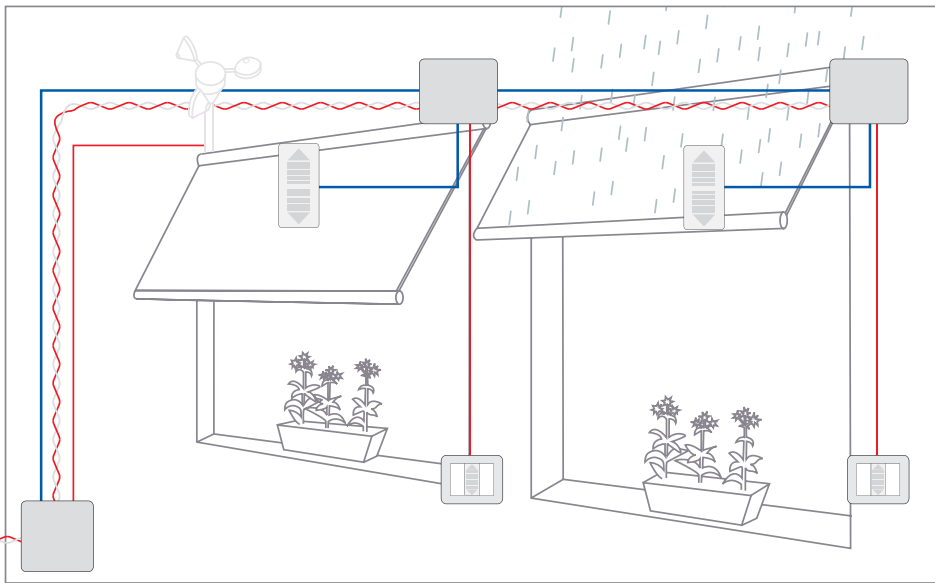
With this configuration you can:
- Raise and lower the curtains locally with the traditional interlocked buttons or with the terminal.
- Control opening and closing of all curtains in sequence at pre-established times*.
- Lower all curtains automatically at a certain time of the day or in certain lighting conditions detected by the twilight sensor connected to the system.
- Raise all curtains automatically in the event of bad weather, in accordance with commands received from the barometer

* N.B. The use of curtains requires them to be equipped with a protection device. Ensure that the system is equipped with automatic limit switches and/or a detection and stopping system in case of obstacles

UP/DOWN

CURTAINS

SOLENOID VALVE

BAROMETER STATION

bpt

NEHOS

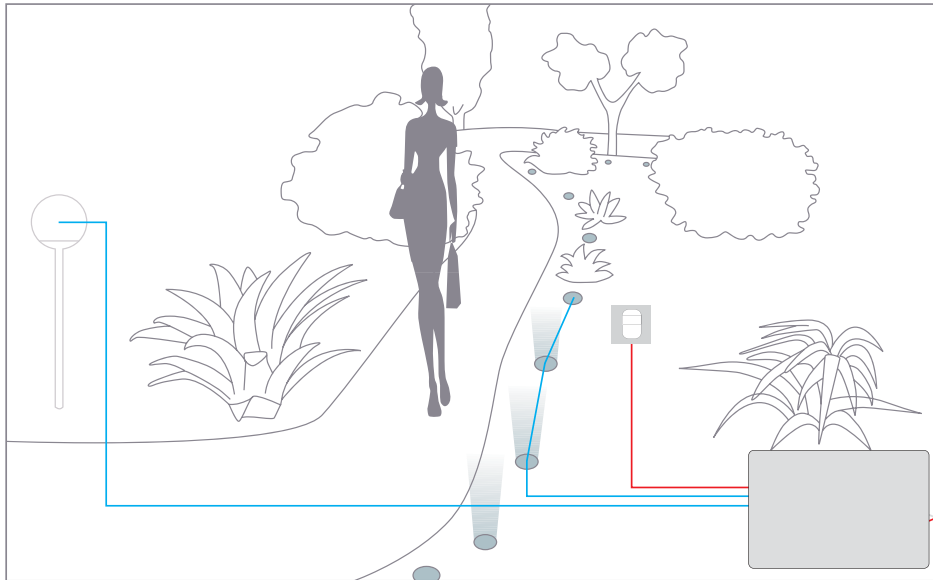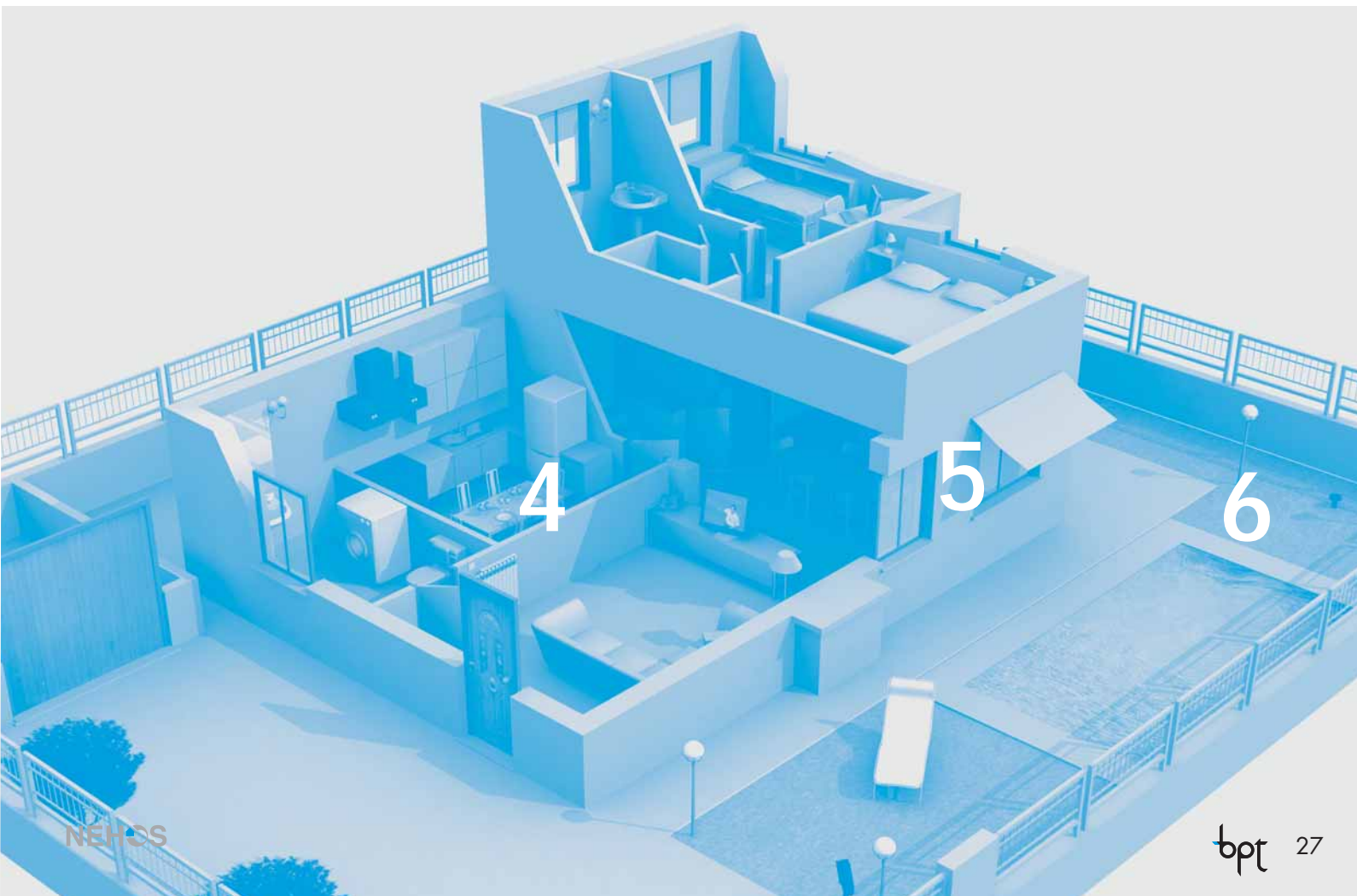## Garden lights scenario.

TIMER

TWILIGHT

BOILER

LIGHTING

Controls
Electrical loads

With this configuration:
- Lights come on and go off automatically when a person passes by.
- Lights come on automatically at a predetermined time.
- A single light/group of lights comes on locally.
- De-activation of the entire system with appropriate general command
  or when the twilight sensor trips.

Along with the classic local control buttons, the terminal can be used to programme when lights will come on or go off without the need to use external timer devices. In traditional systems, any variation would be made via the timer devices located on the panel, which is not particularly convenient.

HOME
SAPIENS