

## SFERA NEW - SFERA ROBUR

### Module a/v with high quality camera

351500

#### Description

Sfera audio/video module for the creation of 2 WIRES colour video systems. Fitted with 5 MP wide angle High-Quality camera with digital filters and white LEDs for the lighting of the shooting field. The HQ digital video signal is transmitted to internal units via PAL encoding on 2 Wires BUS SCS technology. Speaker and microphone volume adjustments. It can manage up to 98 pushbutton calls using the additional double row pushbutton modules. Horizontal angle of vision (119°), vertical angle of vision (92°). It allows the activation of an electrical door lock directly connected to clamps S+ and S- (18 V 4 A impulsive - 250 mA holding current 30 Ohm max) and the connection of a local door lock release pushbutton on clamps PL. Preset for additional power supply. Fitted with front LEDs for the notification of the operating status: door lock release, active communication, forwarded call, and busy system. Integrated optic sensor for the switching on of the night backlighting. To be completed with surround plate. The device must be configured physically or using a PC with the specific software, which can be downloaded free of charge from [www.homesystems-legrandgroup.com](http://www.homesystems-legrandgroup.com)

#### Related items

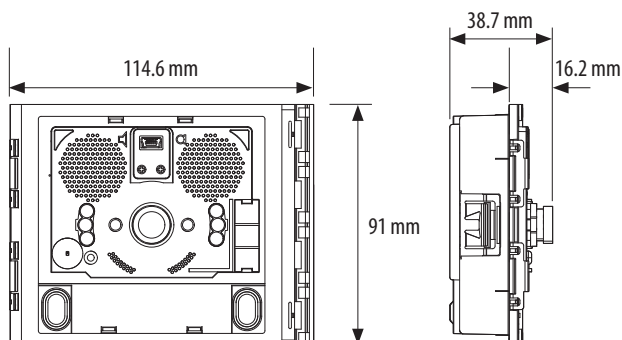
|        |                                                                                       |
|--------|---------------------------------------------------------------------------------------|
| 351301 | Sfera New wide angle A/V front cover - Allmetal (IK 08)                               |
| 351302 | Sfera New wide angle A/V front cover - Allwhite (IK 08)                               |
| 351303 | Sfera New wide angle A/V front cover - Allstreet (IK 08)                              |
| 351311 | Sfera New wide angle A/V front cover with 1 pushbutton - Allmetal (IK 08)             |
| 351312 | Sfera New wide angle A/V front cover with 1 pushbutton - Allwhite (IK 08)             |
| 351313 | Sfera New wide angle A/V front cover with 1 pushbutton - Allstreet (IK 08)            |
| 351321 | Sfera New wide angle A/V f/cover with 2 pushbuttons on double row - Allmetal (IK 08)  |
| 351322 | Sfera New wide angle A/V f/cover with 2 pushbuttons on double row - Allwhite (IK 08)  |
| 351323 | Sfera New wide angle A/V f/cover with 2 pushbuttons on double row - Allstreet (IK 08) |
| 351305 | Sfera Robur wide angle A/V f/cover (IK 10)                                            |
| 351315 | Sfera Robur wide angle A/V f/cover with 1 pushbutton (IK 10)                          |
| 351325 | Sfera Robur wide angle A/V f/cover with 2 pushbuttons on double row (IK 10)           |

#### Technical data

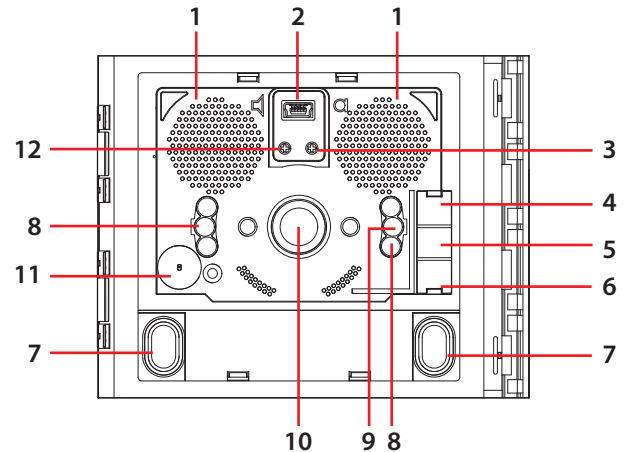
|                                                   |                                    |
|---------------------------------------------------|------------------------------------|
| Power supply from SCS BUS:                        | 20 - 27 Vdc                        |
| Stand by absorption (with backlighting LEDs off): | 12,5 mA                            |
| Stand by absorption (with backlighting LEDs on):  | 20 mA                              |
| Operating absorption:                             | 165 mA                             |
| Colour sensor:                                    | 5Mpixel colour Cmos<br>(2592x1944) |
| Lens:                                             | F: 2,3 f: 2,5 mm                   |
| Field of vision:                                  | 151° (diagonal)                    |
| Illumination of the viewing field:                | white LED                          |
| Operating temperature:                            | (-25) - (+70)°C                    |
| Protection index (pushbutton panel assembled):    | IP 54                              |

**Note:** the device is active when the red LED is off (6), about 10/15" after power supply.

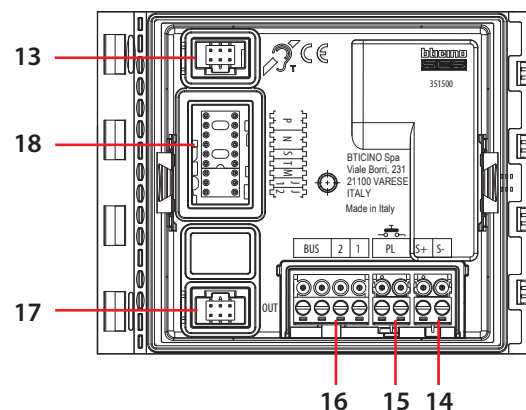
#### Dimensional data



Front view



Rear view



#### Legend

1. Loudspeaker
2. Mini-USB connector for the connection to the PC: download/upload the advanced configuration and device firmware update
3. Microphone volume adjustment
4. LED for door status notification. GREEN ON = door open
5. LED for communication status notification. GREEN ON = active communication
6. LED for system status notification. GREEN ON = put through call  
RED ON = busy system
7. Call pushbuttons
8. White LEDs for night lighting of the shooting field
9. Light sensor for automatic switching on of the night backlighting
10. Wide angle colour camera
11. Microphone
12. Loudspeaker volume adjustment
13. Connector for the connection of the 352700 teleloop module
14. Plug-in clamps for the connection and control of the electrical door lock  
(18V 4 A impulsive 250 mA holding current 30 ohm max)
15. Plug-in clamps for the connection of the local door lock release pushbutton
16. Plug-in clamps for the connection of the local power supply and the 2 WIRE SCS BUS
17. Connector for the connection to subsequent modules
18. Configurator socket

## Configuration

The device must be configured. The configuration can be performed in two ways :

**Mode 1 - with physical configurator connection**

**Mode 2 - using a PC with the specific software, which can be downloaded free of charge from [www.homesystems-legrandgroup.com](http://www.homesystems-legrandgroup.com); this mode has the advantage of offering many more options when compared with the physical configuration.**

### Mode 1

Mod 1 requires the physical connection of the configurators to their sockets

#### P - entrance panel number

The configurator in socket P of the speaker module assigns to this a recognition number inside the system. The numbering of the entrance panels must always start from P=0. The entrance panel configured with P=0 must be a common (or main) entrance panel.

#### N - call number

Assigns the correspondence between the entrance panel pushbuttons and the audio handsets or video handsets.

In common entrance panels made using pushbutton modules, 1 must be inserted in N of the speaker module. The number of the first riser handset must be inserted in the local entrance panels.

#### S - type of call signal

The configuration of S determines the call tone of handsets.

One can thus differentiate the calls from different entrance panels.

For the Classe 100 and Classe 300 handsets, **S** associates the entrance panel to the bell programmed in the handset. It is possible to chose between 16 different preset bells.

For the SPRINT L2 handsets, **S** sets the call ringtone, according to the following table:

| Configurator | 0       | 1       | 2       | 3        |
|--------------|---------|---------|---------|----------|
| Type of bell | 2-tone  | 2-tone  | 2-tone  | One-tone |
|              | 1200 Hz | 1200 Hz | 1200 Hz | 1200 Hz  |
|              | 600 Hz  | 0 Hz    | 2400 Hz |          |

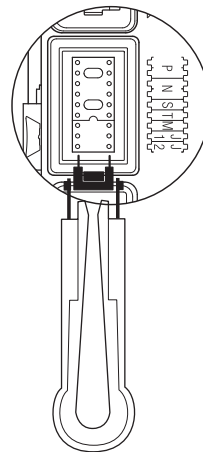
In one-family systems S=9 to configure the general call.

#### T - door lock relay timing

| Configurator number |       |       |       |              |       |       |        |
|---------------------|-------|-------|-------|--------------|-------|-------|--------|
| 0=no configurator   | 1     | 2     | 3     | 4*           | 5     | 6     | 7      |
| 4 sec               | 1 sec | 2 sec | 3 sec | as pushbutt. | 6 sec | 8 sec | 10 sec |

\*Operation as pushbutton for 10 sec. max after which standby mode is activated.

To extend operation time over 10 seconds, use actuator item 346210 configured with MOD=5.



|   |   |   |   |   |    |    |  |  |
|---|---|---|---|---|----|----|--|--|
|   |   |   |   |   |    |    |  |  |
| P | N | S | T | M | J1 | J2 |  |  |
|   |   |   |   |   |    |    |  |  |

**M - enabling/disabling of call tones and door lock release tones, management of night backlighting always ON and management of the transmitted image.**

The M configurations gives the possibility of managing the entrance panel call and door lock release tones. It also gives the possibility of enabling night backlighting always ON (light sensor disabled) and the portion of the image transmitted to the internal units, according to the following table:

| Configurator | M=0               | M=1                     | M=2                | M=3                |
|--------------|-------------------|-------------------------|--------------------|--------------------|
| Tone status  | All tones enabled | Door lock tone disabled | Call tone disabled | All tones disabled |

| Configurator        | M=4                                        | M=5                                              | M=6                                         | M=7                                         |
|---------------------|--------------------------------------------|--------------------------------------------------|---------------------------------------------|---------------------------------------------|
| Backlighting status | All tones enabled + backlighting always ON | Door lock tone disabled + backlighting always ON | Call tone disabled + backlighting always ON | All tones disabled + backlighting always ON |

| Configurator      | M=8                                                          | M=9                                                         | M=SLA                                                          |
|-------------------|--------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------|
| Transmitted image | Video image of the right zone + all tones activated (as M=0) | Video image of the left zone + all tones activated (as M=0) | Video image of the CENTRAL zone + all tones activated (as M=0) |

#### J1 - activation of call pushbutton columns

The J1 configurator gives the possibility of managing the Call pushbuttons of the speaker module as follows:

**J1 CONNECTED** = Only the right pushbutton column is enabled

**J1 DISCONNECTED** = Both pushbutton columns are enabled (right + left)

#### J2 - additional EP power supply

Configurator J2 gives the possibility of enabling the additional power supply (1-2) of the speaker module in the following mode :

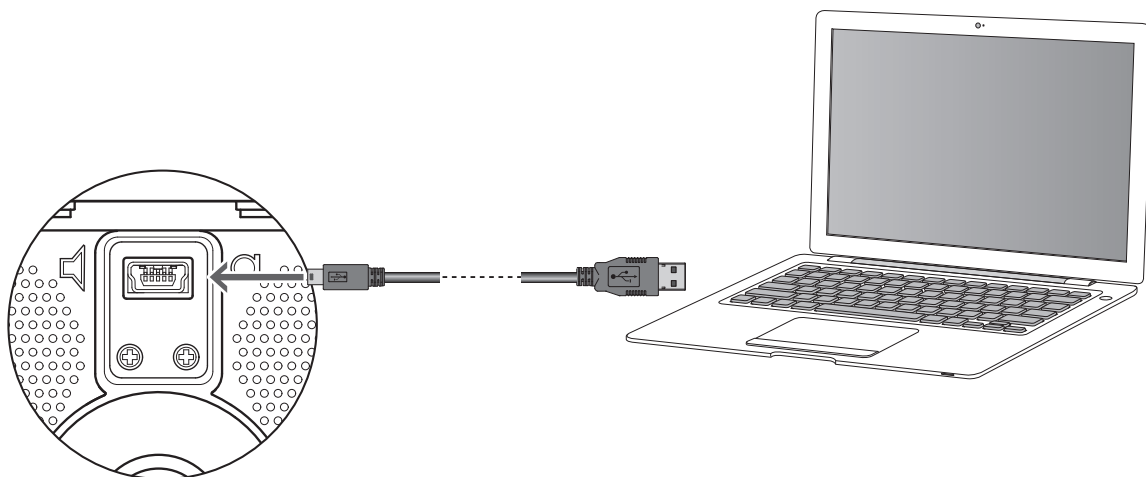
**J2 CONNECTED** = Additional power supply disabled

**J2 DISCONNECTED** = Additional power supply enabled

### Configuration

Mode 2 requires advanced configuration of the device, performed using a PC and the specific software, which can be downloaded free of charge from [www.homesystems-legrandgroup.com](http://www.homesystems-legrandgroup.com); this mode has the advantage of offering many more options when compared with the physical configuration.

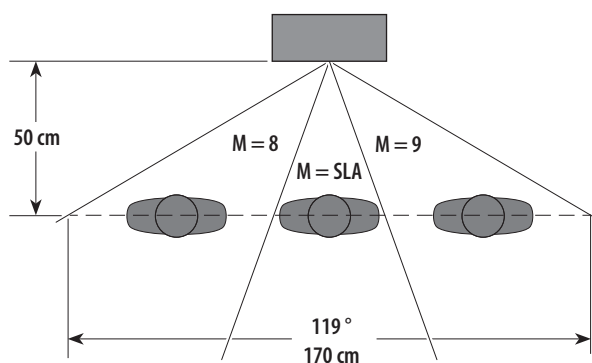
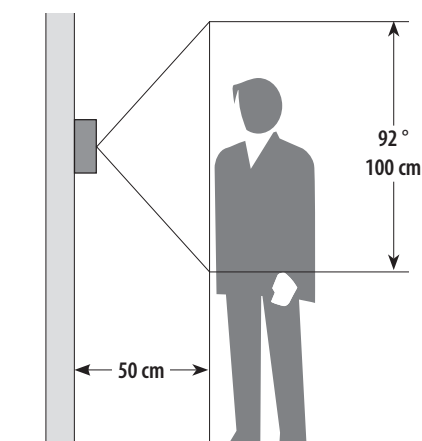
For the connection to the PC use a USB - mini USB cable. The software gives the possibility of configuring, programming, and updating the firmware of the speaker module.



**Warning:** It is essential that the device is powered, in order to correctly send the configuration. Jumper (J1) must be removed. Also ensure that there are no configurators connected to the socket on the back of the module.

**Note:** This device includes the Open Source software. For information on licenses and software used, connect to the device by means of the TiSferaDesign configuration software and access the dedicated section via the appropriate icon.

### Camera shooting field

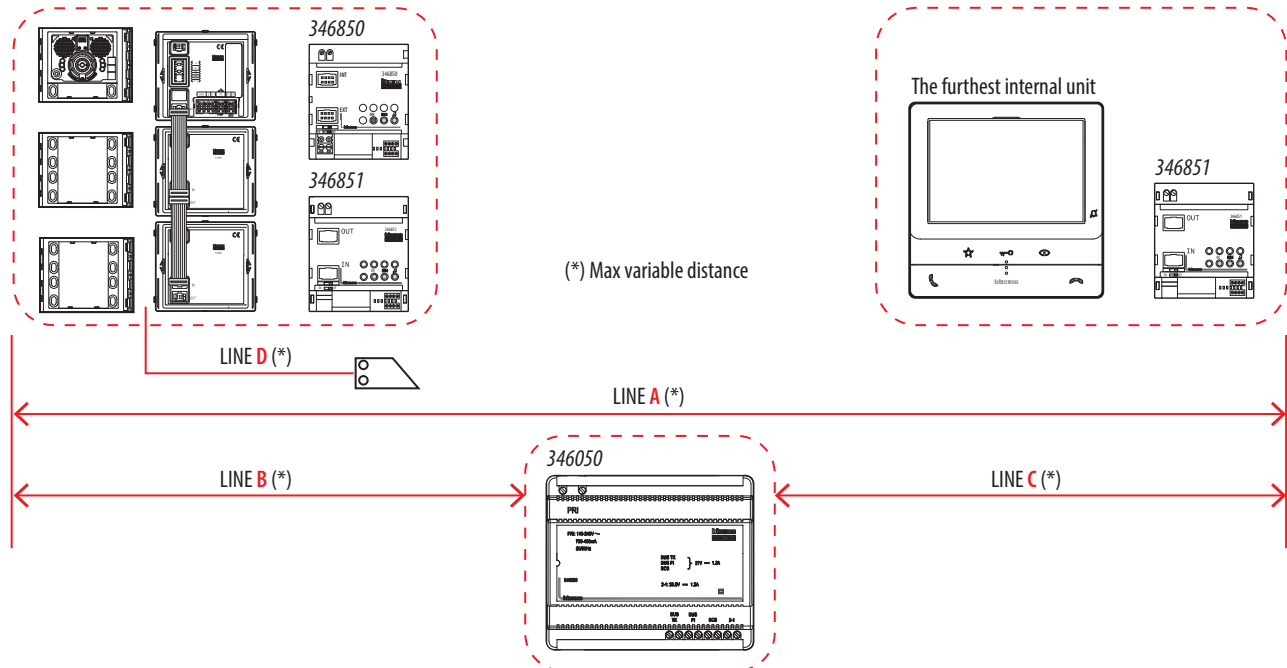


**Maximum distances and cable features**

Multi-family video systems made only with Classe 100 and Classe 300EOS With Netatmo internal units.

**CAUTION!**

The use of conductors with characteristics other than the prescribed ones does NOT guarantee correct performance of the system and good quality of the video signal.



**MAXIMUM DISTANCE (LINE A) ENTRANCE PANEL - FURTHEST INTERNAL UNIT**

|                      | 2 normal cables<br>> 0.2 mm <sup>2</sup> | Bticino cable<br>336904/336905<br>0.5 mm <sup>2</sup> | Telephone twisted<br>pair 0.28 mm <sup>2</sup> | A pair of the<br>multi-pair data<br>cable CAT5 |
|----------------------|------------------------------------------|-------------------------------------------------------|------------------------------------------------|------------------------------------------------|
| 2 IU/2 pushbuttons   | 50 m                                     | 200 m                                                 | 140 m                                          | 180 m                                          |
| 5 IU/5 pushbuttons   | 50 m                                     | 200 m                                                 | 140 m                                          | 155 m                                          |
| 10 IU/10 pushbuttons | 50 m                                     | 200 m                                                 | 140 m                                          | 145 m                                          |
| 26 IU/26 pushbuttons | 50 m                                     | 200 m                                                 | 140 m                                          | 125 m                                          |
| 38 IU/38 pushbuttons | 50 m                                     | 200 m                                                 | 140 m                                          | 110 m                                          |
| 38 IU/ display call  | 50 m                                     | 200 m                                                 | 140 m                                          | 115 m                                          |
| 64 IU/ display call  | 50 m                                     | 200 m                                                 | 140 m                                          | -                                              |

**MAXIMUM DISTANCE (LINE B) ENTRANCE PANEL - POWER SUPPLY**

|                | 2 normal cables<br>> 0.2 mm <sup>2</sup> or L4669 | Bticino cable<br>336904/336905<br>0.5 mm <sup>2</sup> | Telephone twisted<br>pair 0.28 mm <sup>2</sup> | A pair of the<br>multi-pair data<br>cable CAT5 |
|----------------|---------------------------------------------------|-------------------------------------------------------|------------------------------------------------|------------------------------------------------|
| 2 pushbuttons  | 50 m                                              | 160 m                                                 | 100 m                                          | 70 m                                           |
| 5 pushbuttons  | 50 m                                              | 158 m                                                 | 95 m                                           | 68 m                                           |
| 10 pushbuttons | 50 m                                              | 155 m                                                 | 90 m                                           | 65 m                                           |
| 26 pushbuttons | 50 m                                              | 150 m                                                 | 85 m                                           | 63 m                                           |
| 38 pushbuttons | 50 m                                              | 140 m                                                 | 80 m                                           | 60 m                                           |
| Display call   | 50 m                                              | 145 m                                                 | 90 m                                           | 65 m                                           |

**MAXIMUM DISTANCE (LINE C) POWER SUPPLY - FURTHEST INTERNAL UNIT**

|                    | 2 normal cables<br>> 0.2 mm <sup>2</sup> | Bticino cable<br>336904/336905<br>0.5 mm <sup>2</sup> | Telephone twisted<br>pair 0.28 mm <sup>2</sup> | A pair of the<br>multi-pair data<br>cable CAT5 |
|--------------------|------------------------------------------|-------------------------------------------------------|------------------------------------------------|------------------------------------------------|
| 2 IU IN/OUT        | 50 m                                     | 200 m                                                 | 140 m                                          | 95 m                                           |
| 5 IU IN/OUT        | 50 m                                     | 200 m                                                 | 135 m                                          | 90 m                                           |
| 10 IU IN/OUT       | 50 m                                     | 190 m                                                 | 130 m                                          | 85 m                                           |
| 26 IU IN/OUT       | 50 m                                     | 170 m                                                 | 120 m                                          | 75 m                                           |
| 5 IU (with SHUNT)  | 50 m                                     | 200 m                                                 | 110 m                                          | 80 m                                           |
| 10 IU (with SHUNT) | 50 m                                     | 175 m                                                 | 100 m                                          | 70 m                                           |
| 26 IU (with SHUNT) | 50 m                                     | 145 m                                                 | 80 m                                           | 60 m                                           |
| 38 IU (with SHUNT) | 50 m                                     | 125 m                                                 | 70 m                                           | 50 m                                           |
| 64 IU (with SHUNT) | -                                        | 95 m                                                  | 55 m                                           | -                                              |

**MAXIMUM DISTANCE (LINE D) ENTRANCE PANEL - DOOR LOCK**

|               | 0.28 mm <sup>2</sup> | Bticino cable L4669<br>0.35 mm <sup>2</sup> | Bticino cable<br>336904/336905<br>0.5 mm <sup>2</sup> | 1 mm <sup>2</sup> |
|---------------|----------------------|---------------------------------------------|-------------------------------------------------------|-------------------|
| (S+/-) clamps | 30 m                 | 30 m                                        | 50 m                                                  | 100 m             |

- Risers with max 26 internal units should be made in systems with more than 26 internal units.
- Classe 300EOS with Netatmo must be always installed with additional power supply (2-1).
- For correct sizing of the system, we recommend the use of the YouDiagram software which can be downloaded free of charge from [www.professionisti.bticino.it](http://www.professionisti.bticino.it)