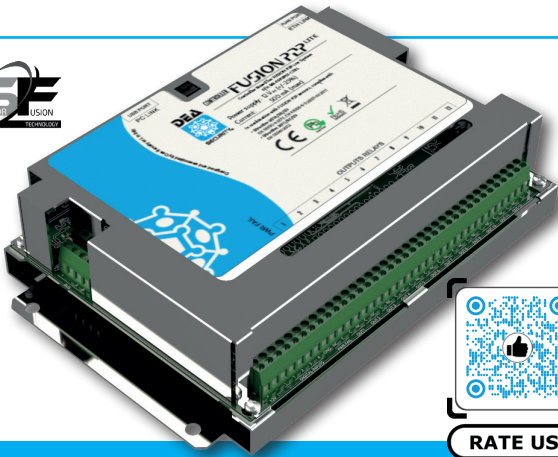




# BR-FSP2PLT-CTRL

SECURITY. CONTROLL BOARD LITE



RATE US!

P/N BR-FSP2PLT-CTRL



## DESCRIPTION

BR-FSP2PLT-CTRL control board manages up to 100 FUSION P2P sensors. It has the function to supply power, to check the operating status and to collect the signals of each sensor, storing the latter in an internal memory and make them available through relay contacts or over DEA NET or IP network Using the service software supplied with the board, you can configure and monitor, either locally or remotely, all the sensors, the peripheral interface modules and the relay expansion boards (if any) connected to the control board.



## PACKAGE CONTENTS

In addition to the datasheet, the package contains no 1 control board (BR-FSP2PLT-CTRL), no 1 booster (BR-FSP2PLT-BS), no 2 ferrites and no 1 mini screwdriver.



**THE CONTROL BOARD MUST BE INSTALLED INSIDE A CASE PROTECTED AGAINST OPENING (EG.: A POLYESTER CABINET, A JUNCTION BOX ETC.)**



To download the service software you can use the link below or the QRcode on the right.  
<https://www.deasecurity.com/shorturl/42utp>  
USER: deasecurity - PASSWORD: deaswservice



DOWNLOAD SW

## COMPLIANCE

In combination with FUSION P2P sensors:

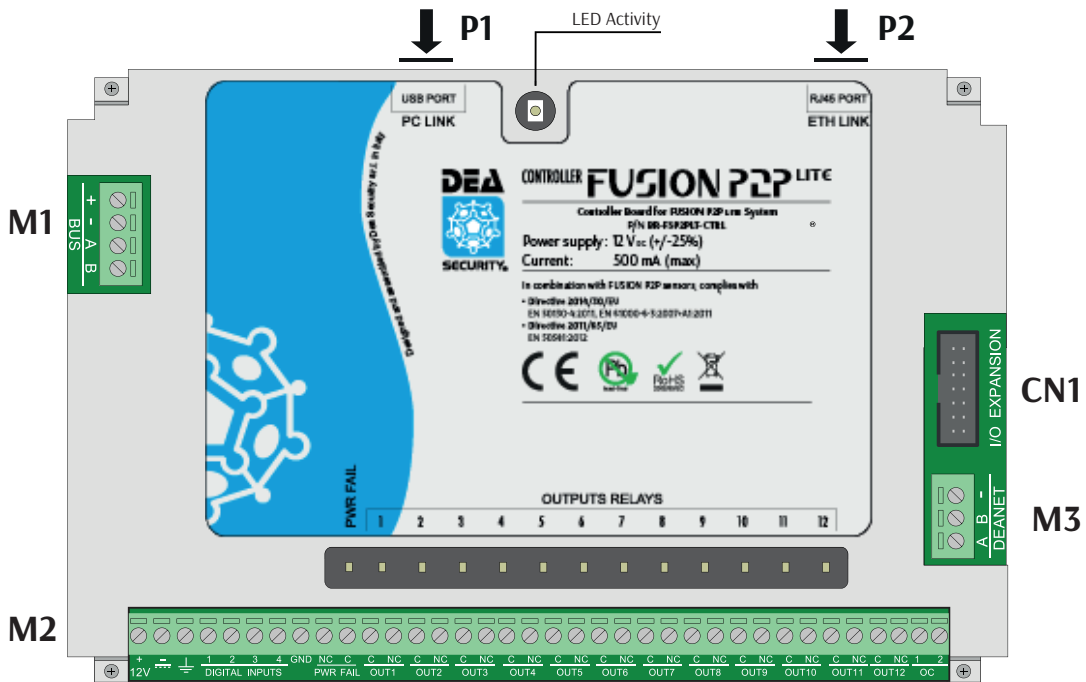
- DIRECTIVE 2014/30/UE**
  - EN 50130-4:2011
  - EN 61000-6-3:2007+A1:2011
- DIRECTIVE 2011/65/UE**
  - EN 50581:2012



## TECHNICAL FEATURES

- DIMENSIONS:** 177 x 117 x 40 mm (L x H x D)
- PACKAGE DIMENSIONS:** 240 x 175 x 65 mm (L x H x D)
- GROSS WEIGHT:** 538 g
- NET WEIGHT:** 304 g
- POWER SUPPLY:** 12 V<sub>DC</sub> (min. 10,8 V<sub>DC</sub> - max 15 V<sub>DC</sub>)
- CURRENT:** 395 mA (Stand-by) - 520 mA (max)
- OPERATING TEMPERATURE:** -25 ÷ +70 °C
- RELATIVE HUMIDITY:** <95% non-condensing
- MANAGEMENT CAPABILITY:** up to 100 sensors
- INPUTS:** 4 optoisolated digital inputs
- NC RELAY OUTPUTS (POSITIVE SECURITY):**
  - general alarm
  - general tamper
  - low supply voltage/service in progress/board anomaly
  - sensor fail/self-test fail
  - bus link loss
  - 8 programmable
- OC OUTPUTS:** 2 programmable
- AUX- C/NC RELAY OUTPUTS:** up to 96 on 6 BR-XS-RE16L expansion boards
- CONNECTIONS:**
  - USB port (PC link)
  - ethernet port
  - DEA NET bus
  - connector for flat cable (BR-XS-RE16L)
- CALIBRATIONS AND CONFIGURATIONS VIA SERVICE SOFTWARE**
- CPU:** 32 bits
- DIGITAL MEMORY:** more than 20.000 events
- SERVICE SOFTWARE LICENCE INCLUDED**

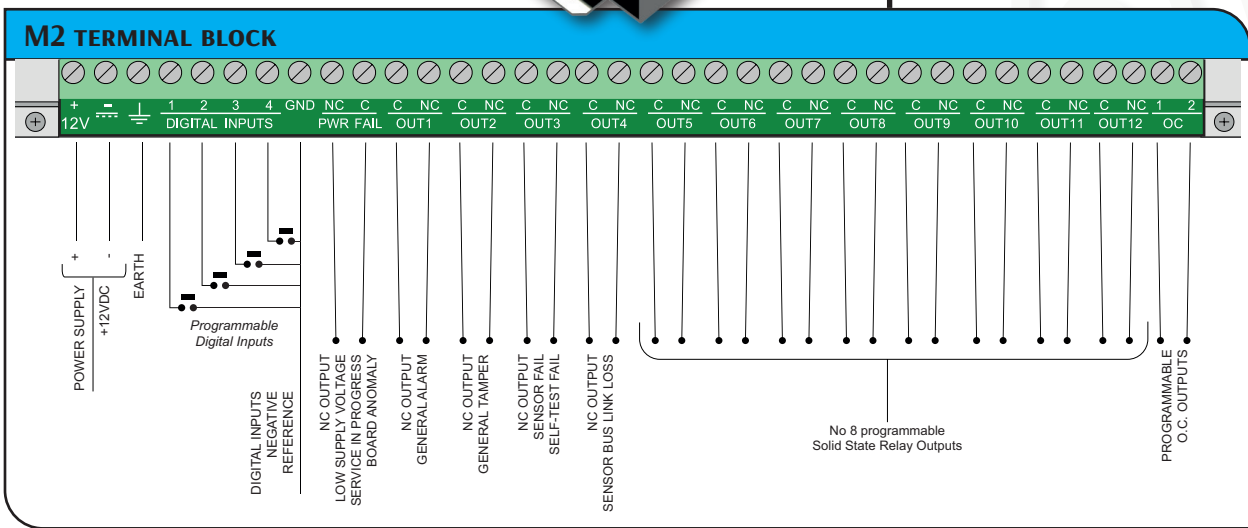
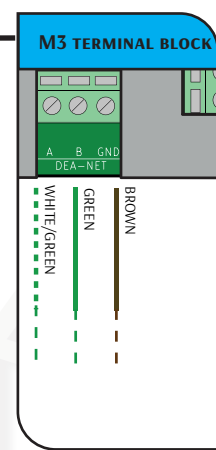
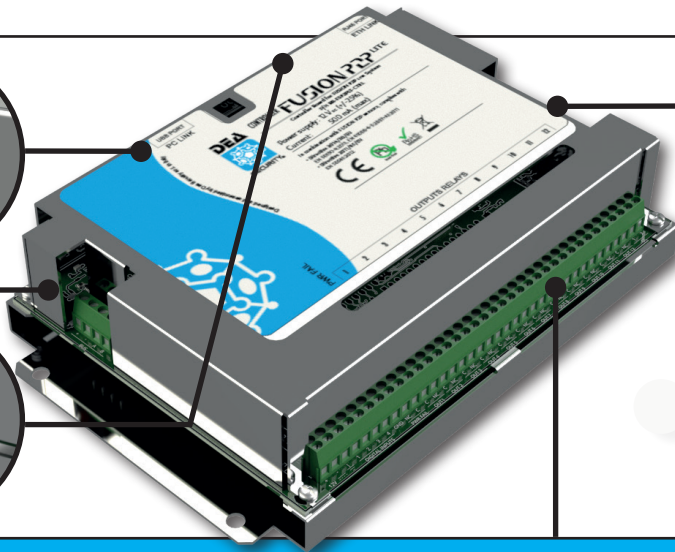
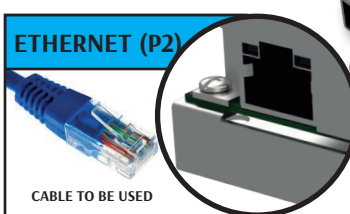
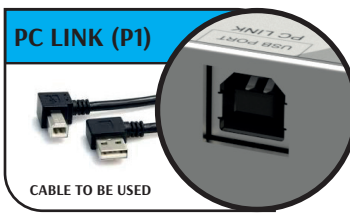
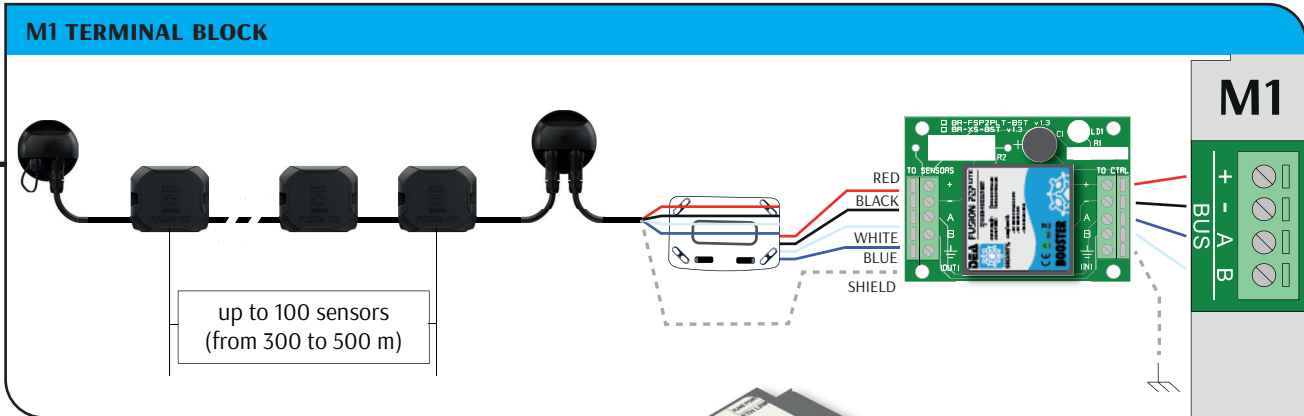
## GENERAL SCHEME





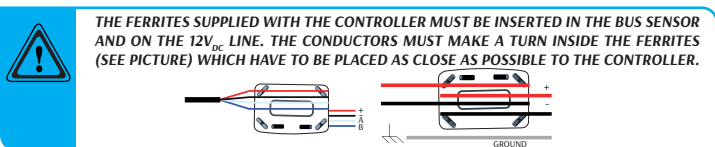
**CONNECTIONS**

The connections of the control board are made through terminal blocks M1 (bus1), M2 (inputs and outputs) and M3 (DEA NET), through CN1 connector (relay expansion boards), USB port (PC Link) and Ethernet port.



- SENSOR BUS (M1 TERMINAL BLOCK)**  
 FUSION P2P sensor-string is connected to BR-FSP2PLT-BS booster which has the function to step up voltage from 12 V<sub>DC</sub> of M1 terminal block to 24V<sub>DC</sub> ensuring the correct power supply to the sensor-string. The bus can manage up to 100 sensors for a perimeter protection of 500 m maximum. A ferrite is provided to improve the immunity of the sensor-string to electromagnetic disturbances.
- POWER SUPPLIES AND INPUTS/OUTPUTS (M2 TERMINAL BLOCK)**  
 The control board is 12Vdc powered. In case of low supply voltage, the PWR FAIL LED turns off and the relay opens. The board is equipped with 4 programmable digital inputs (and a reference negative), 13 NC relay outputs (low supply voltage/service in progress/control board anomaly; general alarm; general tamper; sensor fail/self-test fail; sensor bus link loss plus 8 programmable relays) and 2 OC outputs.

**N.B.** THE SENSOR BUS SHIELD MUST BE GROUNDED ONLY FROM THE BR-FSP2PLT-CTRL CONTROLLER SIDE AND AS NEAR AS POSSIBLE TO THE LATTER.



**N.B.** THE POWER FAIL RELAY ACTIVATES IN CASE OF:  
 LOW SUPPLY VOLTAGE (LESS THAN 10,8 V<sub>DC</sub>)  
 SERVICE IN PROGRESS (SERVICE SOFTWARE CONNECTION ON);  
 BOARD ANOMALY (FOLLOWING A CPU WATCHDOG EVENT).

**IMPORTANT:** ALWAYS CONNECT THE POWER FAIL OUTPUT TO A 24H ZONE OF THE ALARM CONTROL PANEL TO SIGNAL FAILURES OF THE CONTROL BOARD AND/OR LOW SUPPLY VOLTAGE. THE SIGNALS RELATED TO FAILURES MUST BE CONNECTED TO A DEDICATED ZONE OF THE ALARM CONTROL PANEL.

**PC (P1 PORT) AND WANS/LANs (P2 PORT)**

The controller is equipped with the following communication ports:

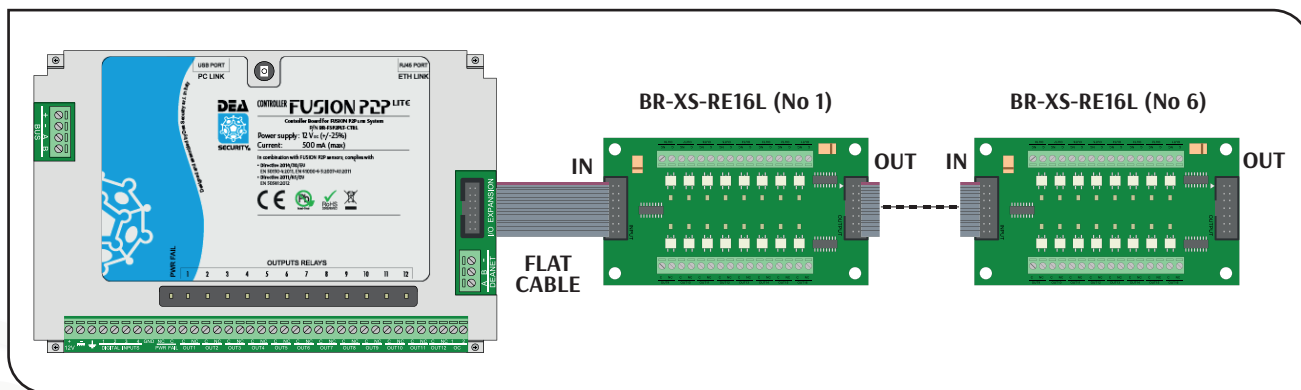
- **P1 port** (USB type B) to be used to connect the PC and perform service activities via service software;
- **P2 port** (ethernet) which allows the connection of FUSION P2P system over LAN/WAN through TCP/IP protocols.

Through P2 port (ethernet), it is possible to:

1. integrate with graphical map management systems;
2. communicate with third-party VMSs (plugin);
3. integrate, through SW-DM-DLL dynamic library, all the signals coming from third-party software;
4. perform service activities using the service software supplied with the control board.

**CONNECTION TO RELAY EXPANSION BOARDS (CN1 CONNECTOR)**

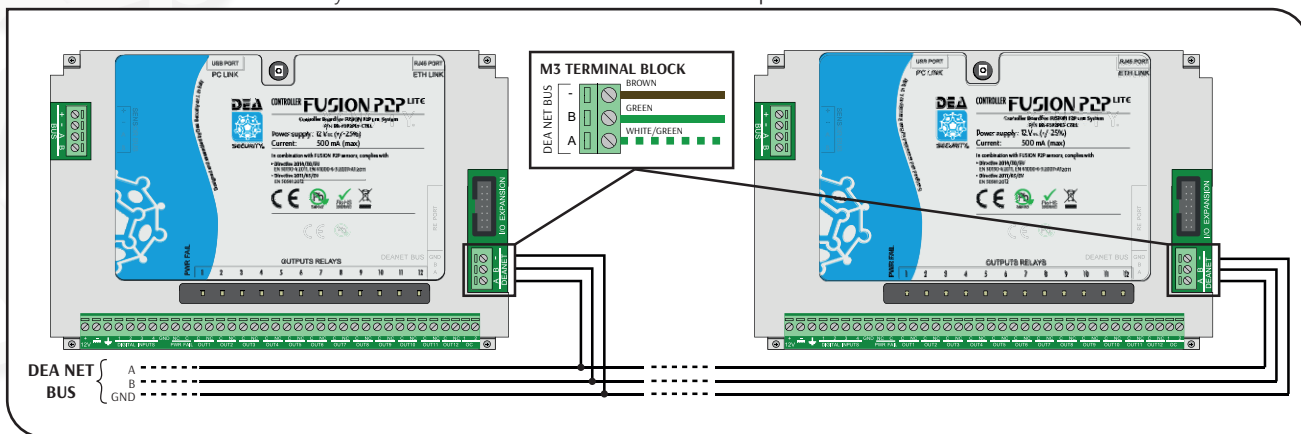
The connection to BR-XS-RE16L expansion boards occurs via 14-pin flat cable which connects CN1 port (I/O EXPANSION) of the control board to the IN-PUT port of the relay expansion board. The additional expansion boards must be cascade connected to the already present relay expansion, keeping the OUTPUT-INPUT correspondance.



Each control board can manage up to 6 relay expansion boards for a total of 96 configurable relays. The distance between the relay outputs of the expansion boards and the inputs of the alarm control panel must not be more than 3 metres.

**CONNECTION TO DEA NET BUS (M3 TERMINAL BLOCK)**

The connection over DEA NET occurs by means of the M3 terminal block as shown in the picture.



**LEDS**

Below you can find a table with the description of each LED present on the control board:

| LED        | SIGNAL   | COLOUR |
|------------|--|--------|
| Power fail | <ul style="list-style-type: none"> <li>▪ ON: normal functioning of the board</li> <li>▪ OFF: low supply voltage (less than 10,8 V) or service in progress (software connection ON) or board anomaly</li> </ul> | GREEN  |
| 1          | GENERAL ALARM RELAY ON   | RED    |
| 2          | GENERAL TAMPER RELAY ON  | RED    |
| 3          | SENSOR/PERIPHERALS GENERAL FAIL/SELF-TEST FAIL RELAY ON  | RED    |
| 4          | SENSOR BUS LINK LOSS RELAY ON  | RED    |

| LED      | SIGNAL                                     | COLOUR |
|----------|--|--------|
| 5        | CONFIGURABLE RELAY 1 ON                    | RED    |
| 6        | CONFIGURABLE RELAY 2 ON                    | RED    |
| 7        | CONFIGURABLE RELAY 3 ON                    | RED    |
| 8        | CONFIGURABLE RELAY 4 ON                    | RED    |
| 9        | CONFIGURABLE RELAY 5 ON                    | RED    |
| 10       | CONFIGURABLE RELAY 6 ON                    | RED    |
| 11       | CONFIGURABLE RELAY 7 ON                    | RED    |
| 12       | CONFIGURABLE RELAY 8 ON                    | RED    |
| Activity | REGULAR BOARD ACTIVITY (Normally blinking) | GREEN  |



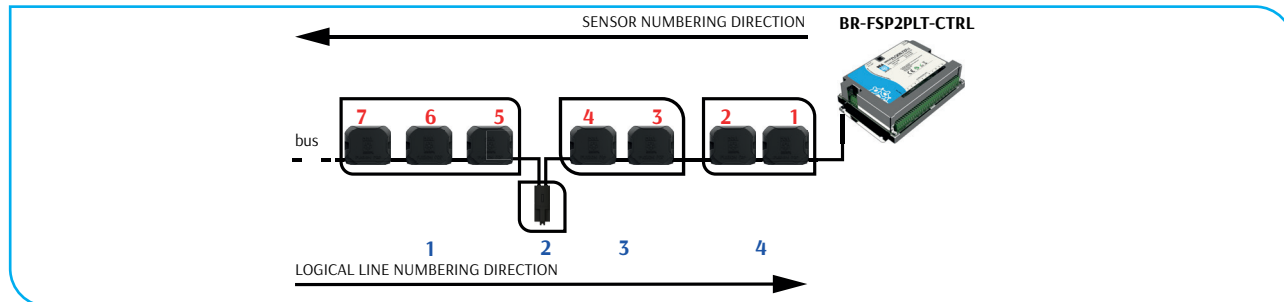
### SENSORS AND/OR RELAY BOARDS ACQUISITION

After installing the sensors, connecting the sensor-strings and the relay expansion boards (if any) to the controller, it is necessary to configure the system. The service software provides an **Auto Setting button** which allows, through a wizard, to configure the whole system in terms of assignment of the sensors to the lines and of configuration of the relay outputs.

After launching the service software and entering the configuration page, start the **Auto Setting** procedure, through which you can:

- acquire the sensors and possible input modules (univocally identified by serial number) connected to the bus;
- sort sensors and input modules on a physical basis (sensor N. 1 is the sensor closer to the controller);
- assign the acquired sensors to logical lines following the selected procedure (see User Software Manual);
- detect the relay expansion boards (if any) connected to the Controller;
- assign logical lines to available relays to have (if the relays are sufficient) an alarm relay and a tamper relay for each logical line; it is also possible to select several modes to assign the relays.

Once the Auto Setting procedure is completed, all the sensors and the input modules have been assigned to logical lines and all the relays have been configured. Depending on specific needs, it is also possible to customize the configuration of the lines and/or the relays.



### CALIBRATION

#### MEMS DEVICE

Once the lines /relays configuration phase has been completed, you must calibrate the sensor-strings. The quickest way is to click the **Action** command from the drop-down menu and select **All lines calibration**.



**THE CALIBRATION MUST BE PERFORMED ON ALL THE LINES CONFIGURED.**

#### STRUCTURE TYPE SELECTION

Before calibration, it is necessary to select, from drop-down menu, the type of structure to be protected; 7 presets are available for each type of structure..

#### SENSITIVITY AND SECURITY LEVELS

The detection capability of the sensor can be programmed using two parameters:

- **Sensitivity level**, which acts on the input signal gain. It is possible to vary the trimmer from 0 (min) to 100 (max).
- **Security level**, which acts on the signal processing parameters of the sensor, affecting readiness and receptivity with which the system reacts to external events (weak impacts, gross impacts, continuous vibrations and heavy attacks). Three different settings are available:
  - HIGH: Maximum detection reactivity;
  - MEDIUM (default): Medium detection reactivity. This is the default setting and, under normal conditions, provides the best ratio between detection reactivity and environmental disturbances immunity;
  - LOW: minimum detection reactivity. Indicated in case of harsh environmental disturbances which require a very high immunity while maintaining a good detection readiness.



**N.B.** IF USB PORT IS USED, CONNECT THE CABLE ONLY AFTER POWERING THE BOARD ON.

**N.B.** THE BOARD MUST BE INSTALLED INSIDE A CASE AGAINST OPENING. THE INSTALLATION OF THE BOARD IN EXTERNAL ENVIRONMENT IS POSSIBLE ONLY INSIDE WATER-PROOF CABINETS. IF TEMPERATURE AND HUMIDITY ARE OUT OF RANGE, IT IS NECESSARY TO INSTALL AN AIR-CONDITIONING UNIT INSIDE THE BOX. DEA SECURITY SUGGESTS PERIODICALLY CHECKING ALL THE EQUIPMENT TO ENSURE MAXIMUM EFFICIENCY OVER TIME.



**N.B.** FOR FURTHER INFORMATION ABOUT THE SERVICE SOFTWARE, PLEASE SEE THE RELATED SOFTWARE MANUAL.

### DEA Security S.r.l.

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