

**CAD LIBRARY**

**DEA**



**SECURITY®**

**SISMACA/PF®**

**UNDERFLOOR INTRUSION DETECTION SYSTEM**



## CONTENS

### SISMA CA/CAPF SYSTEM COMPONENTS

MD-SMCA – Sensor-module for flooring.....	5
MD-SMCAPF – Sensor-module for raised floors.....	7
BR-SMCA-Z1 – Single-zone board .....	9
BR-XS-CTRL32 – Control board.....	11
BR-XS-SMCAPU – Pheripheral board .....	13
JBX-SMCA – Juntion .....	15

### APPLICAZIONI DEL SISTEMA SISMA CA/CAPF

Installation of SISMA CA sensor-modules.....	17
Installation of SISMA CA sensor-modules on walls.....	21
Installation of SISMA CAPF sensor-modules.....	23
System configuration with single-zone boards.....	25
Configuration with SISMA PU peripherals on bus.....	27
Configuration with centralized peripherals for SISMACA .....	29
Configuration with centralized peripherals for SISMACAPF.....	31

© 2023 DEA Security S.r.l.

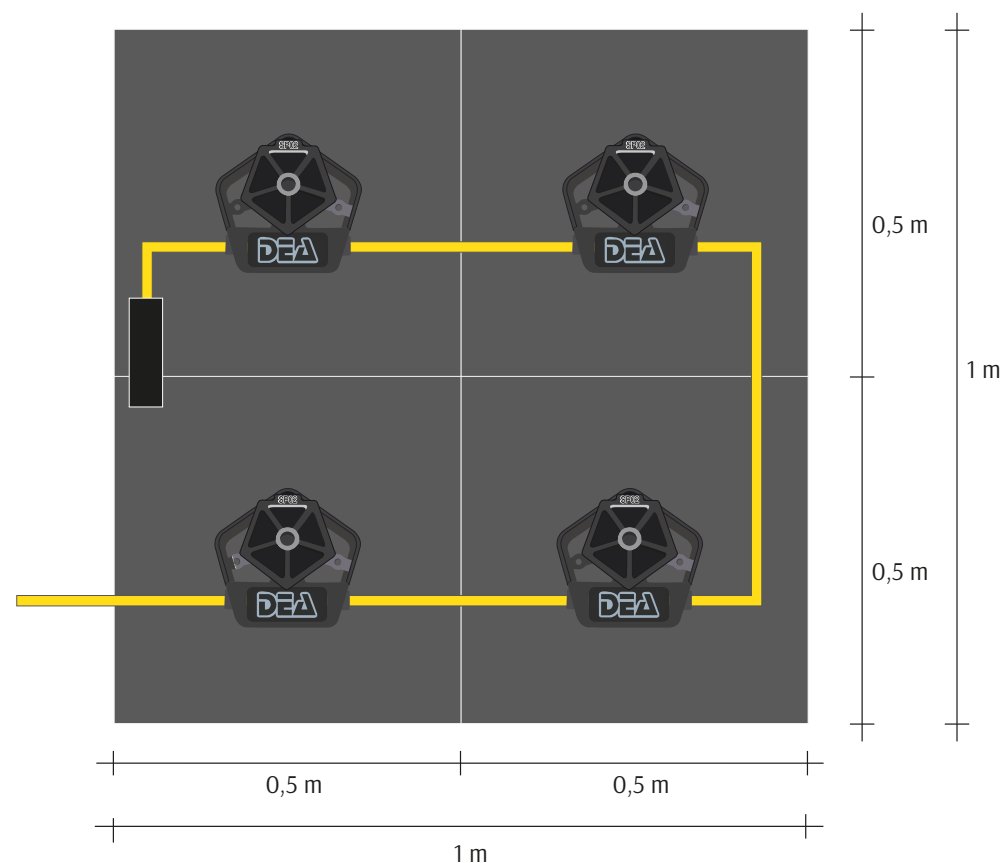
edition August 2023 - v. 1.0.1

DEA Security srl reserve the right to change at any time and without notice the features of its products.

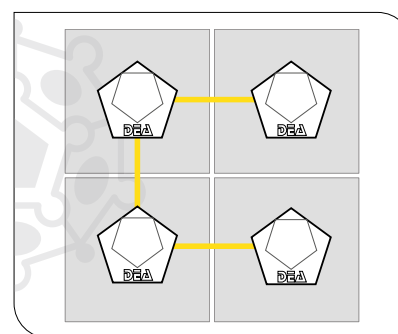
All trademarks shown belong to their legitimate owners. Third party brands, product names, trade names, corporate names and companies mentioned may be trademarks of their respective owners or registered trademarks of other companies and have been used for the purpose of explanation and / or for the benefit of the owner, without any intention to violate their respective intellectual properties.

DEA Security S.r.l. reserves the right to provide this document in editable formats (dwg, dxf, etc.).





## PROJECT ICON



## VERSIONS AVAILABLE

PART NUMBER	DESCRIPTION
MD4-SMCA	4 sensors for 1,0 m <sup>2</sup> protection
MD6-SMCA	6 sensors for 1,5 m <sup>2</sup> protection
MD8-SMCA	8 sensors for 2,0 m <sup>2</sup> protection
MD10-SMCA	10 sensors for 2,5 m <sup>2</sup> protection
MD12-SMCA	12 sensors for 3,0 m <sup>2</sup> protection
MD16-SMCA	16 sensors for 4,0 m <sup>2</sup> protection
MD20-SMCA	20 sensors for 5,0 m <sup>2</sup> protection
MD24-SMCA	24 sensors for 6,0 m <sup>2</sup> protection

## TECHNICAL DATA

### COMPLIANCE

In combination with the related processing boards:

- DIRECTIVE 2014/30/UE (EMC)**
  - EN 50130-4:2011+A1:2014
  - EN 61000-6-3:2007+A1:2011
- DIRECTIVE 2011/65/UE (ROHS)**
  - EN 50581:2012
- CEI 79-2 (2<sup>a</sup> edition)**



### TECHNICAL FEATURES

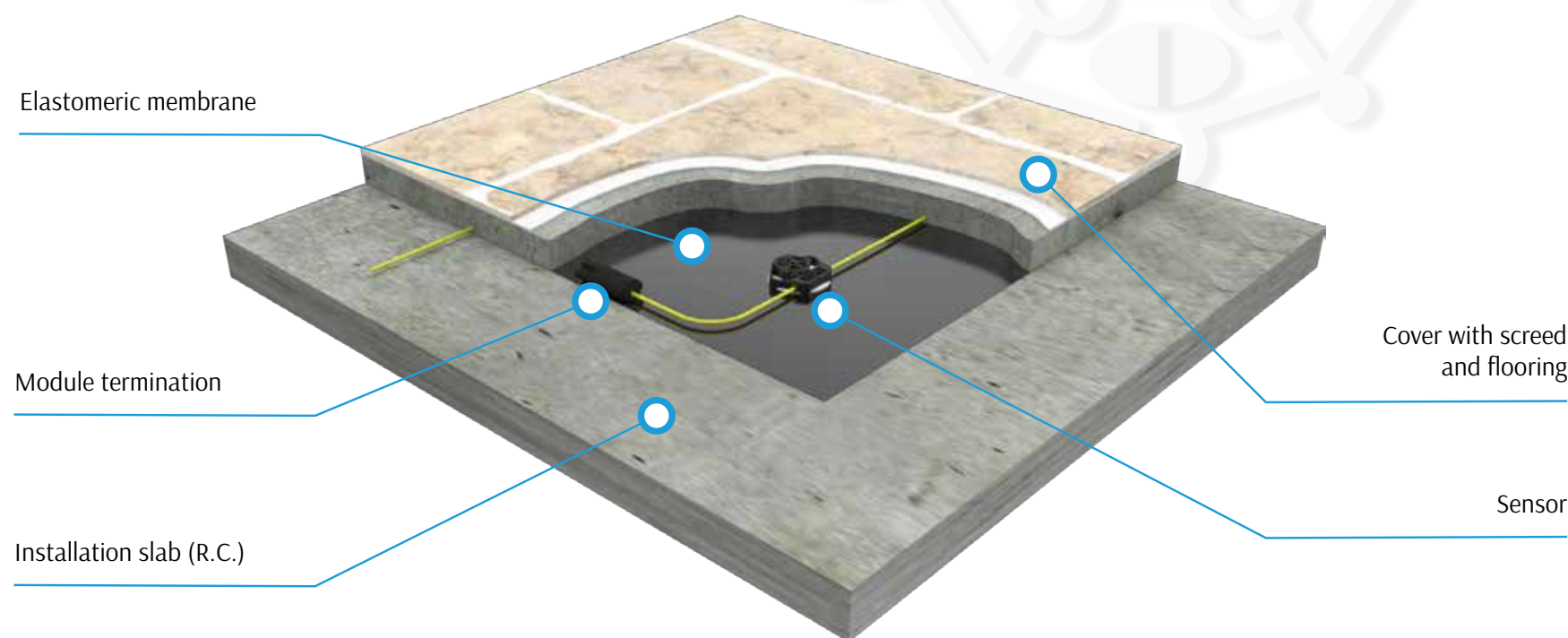
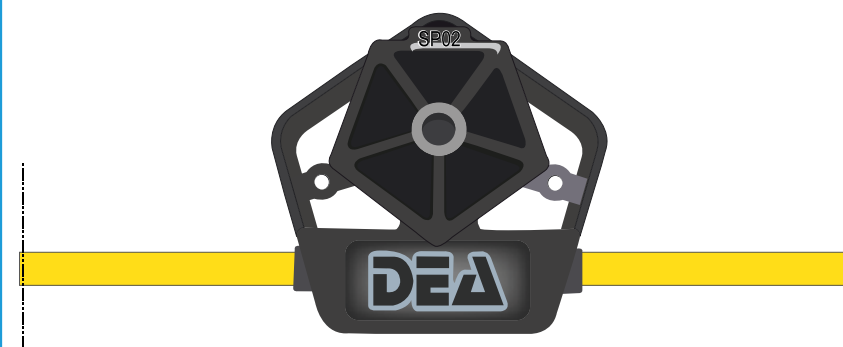
#### SENSOR

- DIMENSIONS:** 106 X 26 mm (Ø X H)
- OPERATING TEMPERATURE:** -40 ÷ +80 °C
- RELATIVE HUMIDITY:** 0 – 100%
- MATERIAL:** ABS body, sealed with epoxy

#### ELASTOMERIC MEMBRANE:

- DIMENSIONS:** 50 x 50 cm (L x W)
- MATERIAL:** SBR rubber,
- CONNECTION CABLE:** please see CV-SMCA cable datasheet
- CEMENT-BASED ADHESIVE:** model Kerakoll BIOGEL NO LIMITS

## DETAIL



**SISMACA**

Sensor-module for flooring

p/n. **MD-SMCA**

Scale 1:10

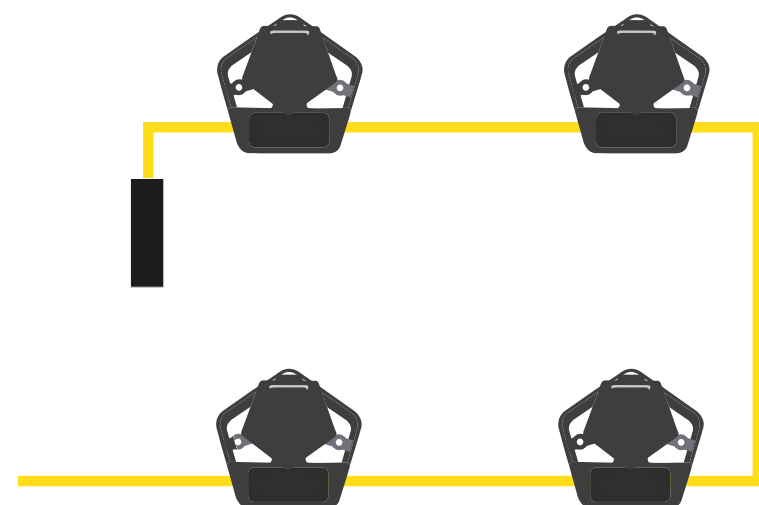
**DEA**



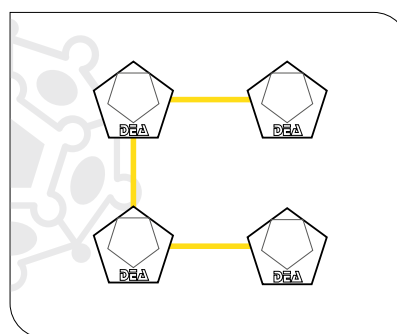
SECURITY®

© 2023 DEA Security S.r.l. v. 1.0.0

DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.



## PROJECT ICON



## VERSIONS AVAILABLE

P/N	DESCRIPTION
MD4-SMCAPF	4 sensors for the protection of 6 m² of surface
MD6-SMCAPF	6 sensors for the protection of 9 m² of surface
MD8-SMCAPF	8 sensors for the protection of 12 m² of surface
MD12-SMCAPF	12 sensors for the protection of 18 m² of surface
MD16-SMCAPF	16 sensors for the protection of 24 m² of surface

## TECHNICAL DATA

### COMPLIANCE

In combination with the related processing boards::

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



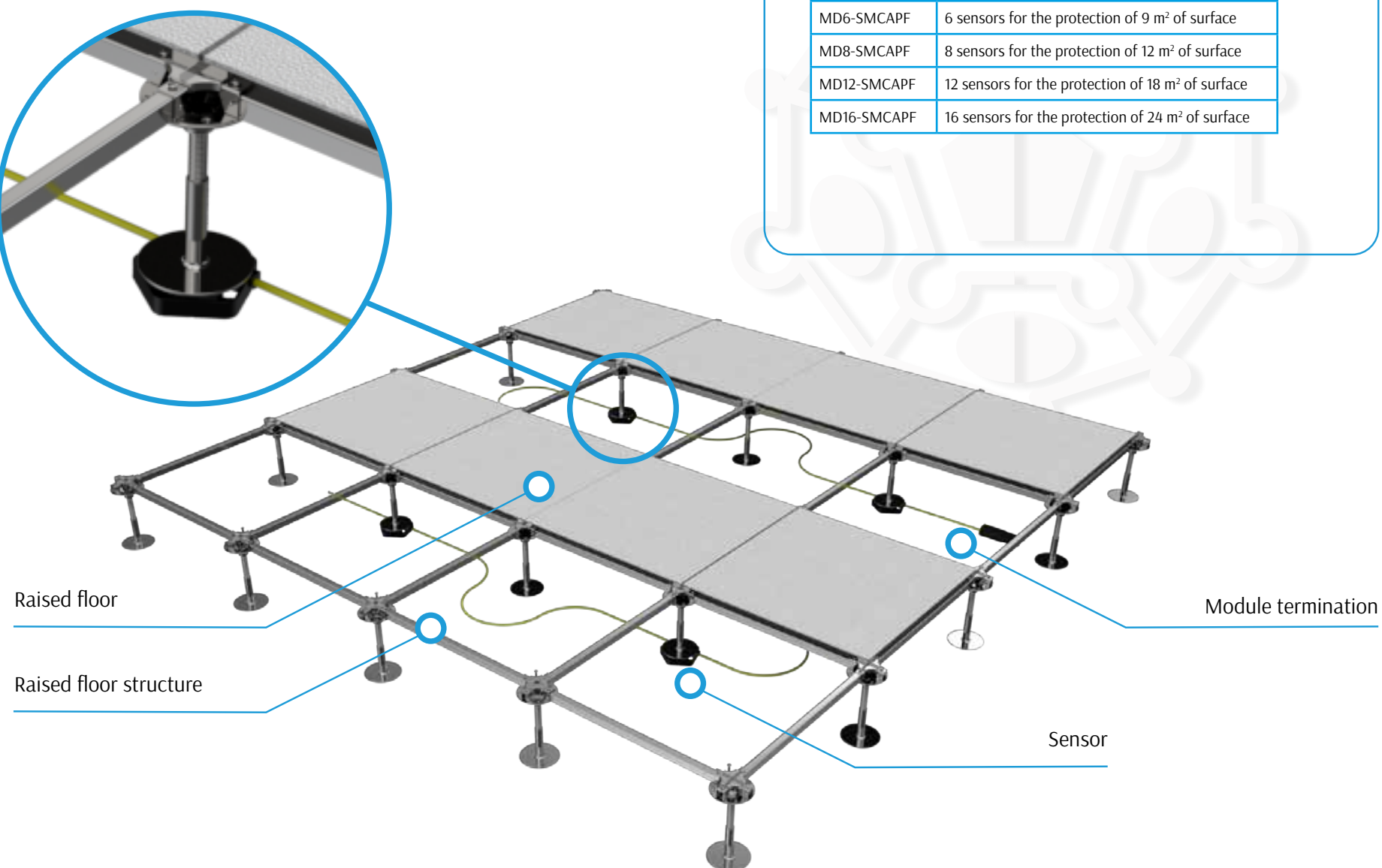
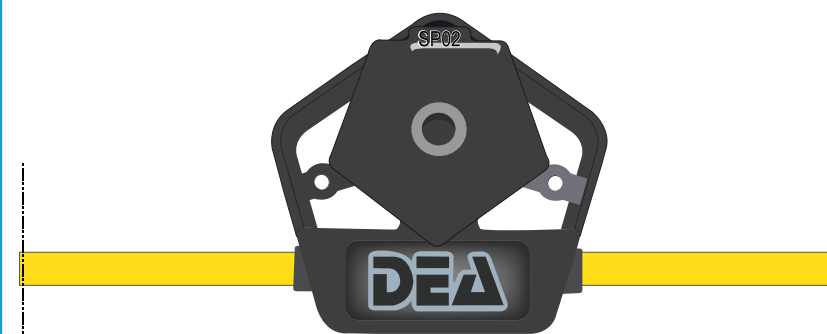
### TECHNICAL FEATURES

#### SENSOR:

- DIMENSIONS:** 106 x 25 mm (Ø X H)
- OPERATING TEMPERATURE:** -40 ÷ +80 °C
- RELATIVE HUMIDITY:** 0 - 100%
- MATERIALE:** ABS sealed with epoxy resin

**CABLE:** For further information see **CV-SMCA** datasheet

## DETAIL



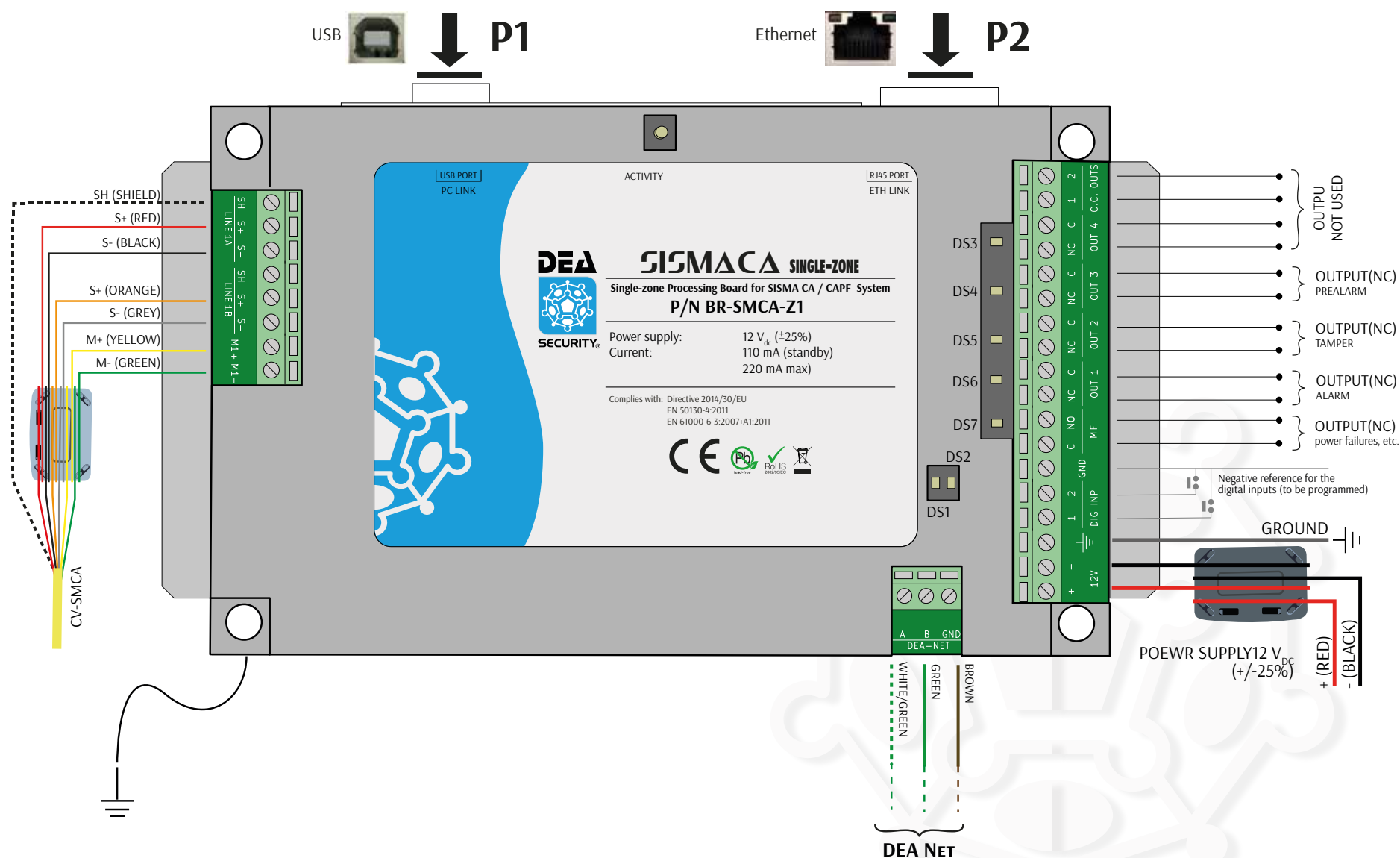
# SIGMACAPF

Sensor-module for raised floors

p/n. **MD-SMCAPF** Scale 1:10



© 2023 DEA Security S.r.l. v. 1.0.0  
DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.



## TECHNICAL DATA

### COMPLIANCE

In combination with the sensor-module:

- DIRECTIVE 2014/30/EU**
  - EN 50130-4:2011 + A1:2014
  - IEC 61000-6-4:2018
- DIRECTIVE 2011/65/EU**
  - EN 50581:2012



### TECHNICAL FEATURES

- DIMENSIONS:** 178 x 90 x 40mm (L x H x W)
- PACKAGE DIMENSIONS:** 190 x 95 x 50 mm (L x H x W)
- GROSS WEIGHT:** 368 g
- NET WEIGHT:** 240 g
- POWER SUPPLY:** 12 V<sub>DC</sub> (+/-25%)
- CURRENT:** 110 mA (max)
- OPERATING TEMPERATURE:** -25 ÷ +80 °C
- RELATIVE HUMIDITY:** <95% non condensing
- ANALYSIS CAPABILITY:** up to 1 SISMA CA or SISMA CAPF module
- INPUTS:** 2 opto-isolated digital inputs, programmable via software
- NC RELAY OUTPUTS (POSITIVE SECURITY):**
  - 1 for sensor-module alarm
  - 1 for sensor-module prealarm
  - 1 for sensor-module tamper
  - 1 for low supply voltage, service in progress or functioning anomalies of the board
- COMMUNICATION PORTS:**
  - USB port (PC link)
  - ethernet port (RJ45)
  - DEA NET bus
- CALIBRATION, SETTINGS AND EVENTS MANAGEMENT VIA SOFTWARE**
- CPU:** 32 bits, 168 MHz
- DIGITAL MEMORY:** more than 20.000 events
- SERVICE SOFTWARE LICENCE INCLUDED**

## PROJECT ICON



# SISMA CA

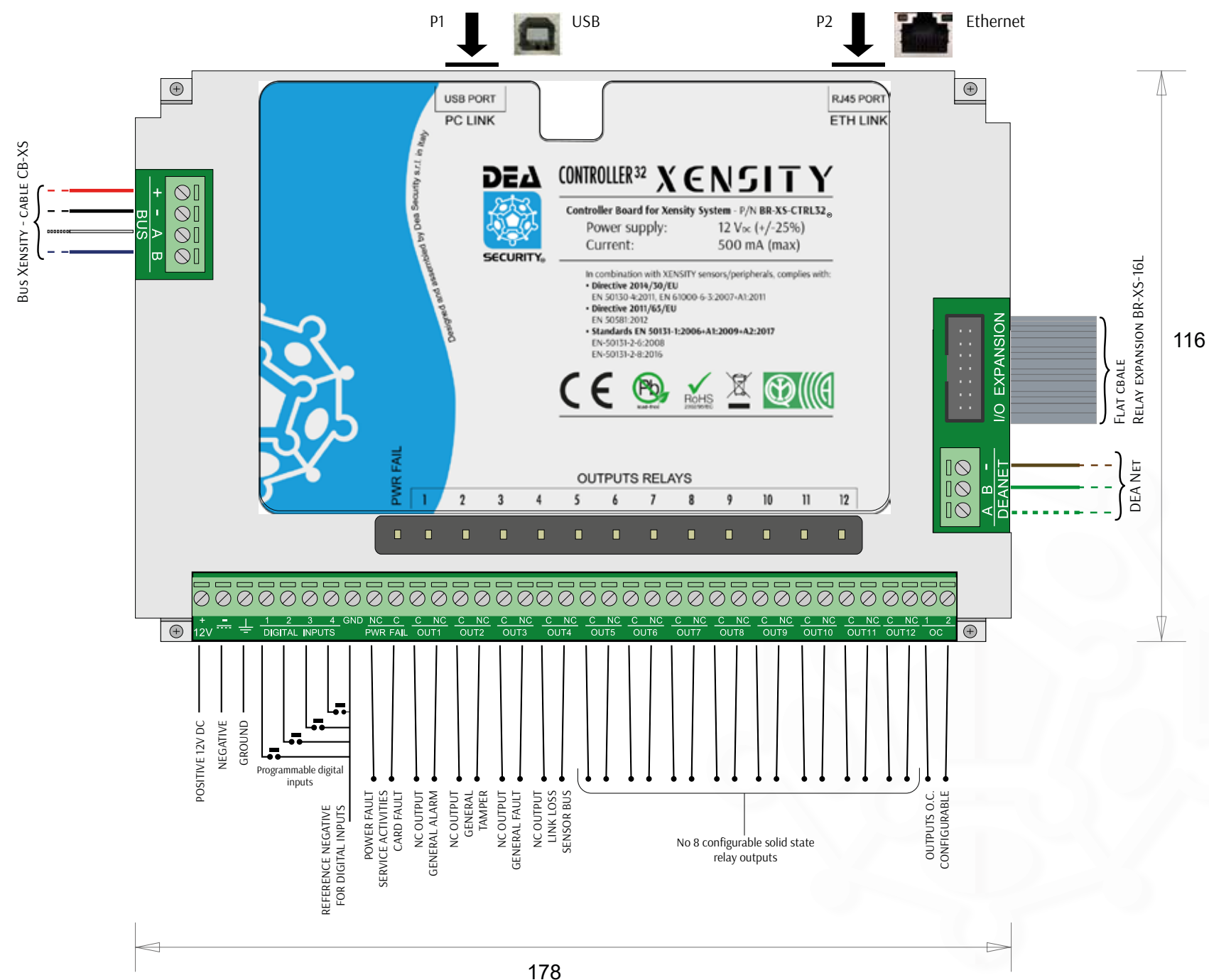
Single-zone processing board

p/n. **BR-SMCA-Z1** Scale 1:1

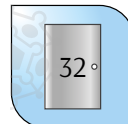


© 2023 DEA Security S.r.l. v. 1.0.0  
DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.





#### PROJECT ICON



#### TECHNICAL DATA

##### COMPLIANCE

In combination with XENSITY sensors/peripherals:

- DIRECTIVE 2014/30/EU**
  - EN 50130-4:2011
  - EN 61000-6-3:2007+A1:2011
- DIRECTIVE 2011/65/EU**
  - EN 50581:2012
- STANDARDS EN 50131-1:2006+A1:2009+A2:2017**
  - EN-50131-2-6:2008
  - EN-50131-2-8:2016



##### TECHNICAL FEATURES

- SECURITY GRADING:** Grade 3 certified  
EN 50131-2-6 in combination with SN-XS-FDRM  
Grade 3 certified  
EN 50131-2-8 in combination with SN-XS-FWL
- DIMENSIONS:** 178 x 116 x 30 mm (L x H x W)
- PACKAGING DIMENSIONS:** 235 x 170 x 70 mm (L x H x W)
- GROSS WEIGHT:** 604 g
- NET WEIGHT:** 302 g
- POWER SUPPLY:** 12 V<sub>dc</sub> (+/-25%)
- CURRENT:** 0,5 A (max)
- OPERATING TEMPERATURE:** -25 ÷ +70 °C
- RELATIVE HUMIDITY:** <95% non condensing
- INPUTS:** 4 digital opto-isolated
- NC STATE SOLID RELAY OUTPUTS:**
  - general intrusion alarm
  - general tamper
  - power Fail / service Activity / CPU fault detection
  - sensor fail / selftest fail
  - bus link loss
  - 8 programmable
- AUXILIARY C/NC RELAY OUTPUTS:** up to 64 on 4 BR-XS-RE16L expansion boards
- OC OUTPUTS:** 2 programmable
- COMMUNICATION PORTS:**
  - ethernet (RJ45)
  - USB
  - bus DEANET
  - connector for flat cable (BR-XS-RE16L)
- NO OF DEVICES MANAGED:** up to 32 sensors/peripheral
- CALIBRATIONS AND CONFIGURATIONS TROUGHT SERVICE SOFTWARE**
- CPU PROCESSING CAPACITY:** 32 bit
- DIGITAL MEMORY:** more than 20.000 events
- SERVICE SOFTWARE LICENCE INCLUDED**

# XENSITY

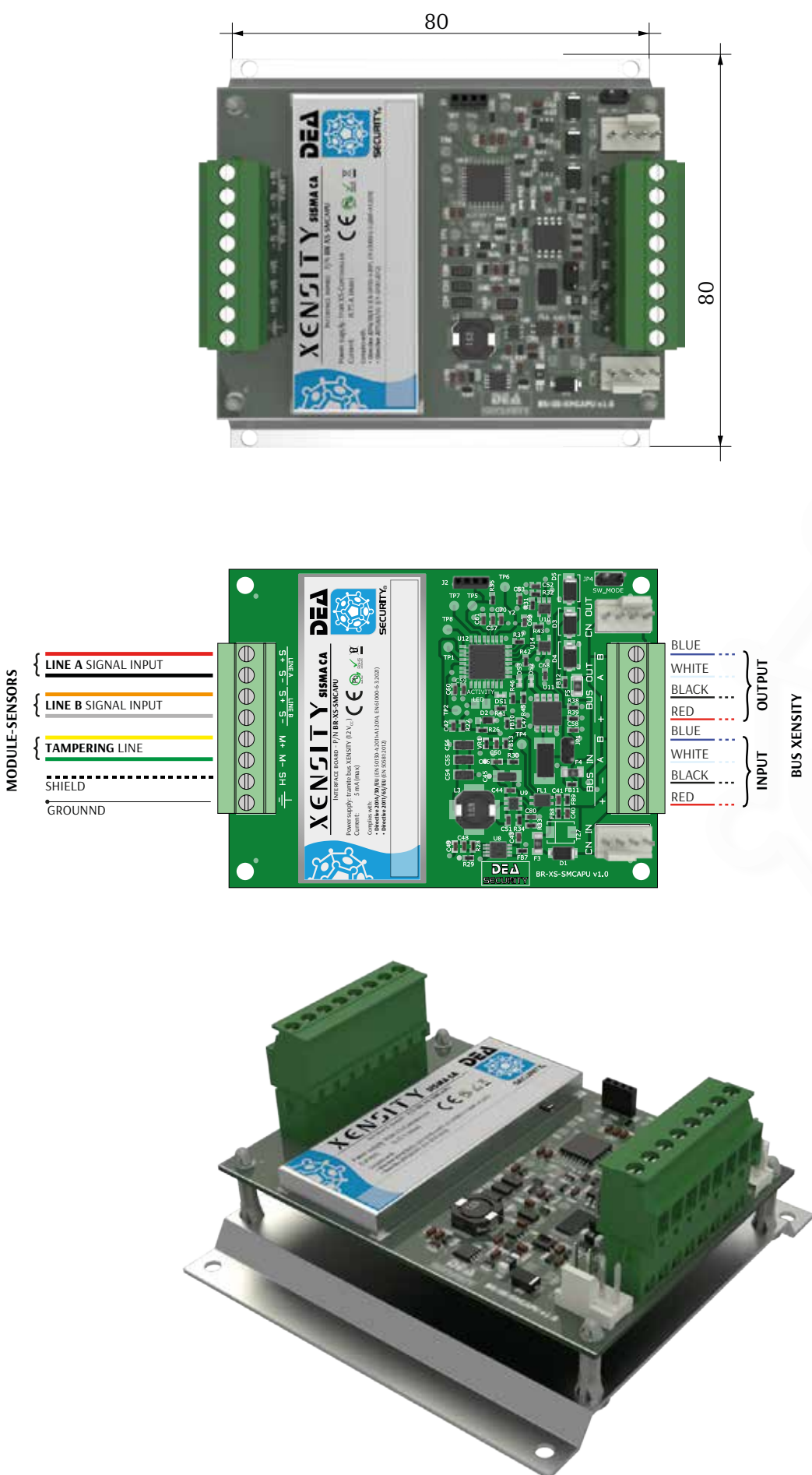
Control board for 32 sensors

p/n. **BR-XS-CTRL32** Scale 1:1



© 2023 DEA Security S.r.l. v. 1.0.4

DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.



## TECHNICAL DATA

### COMPLIANCE

In combination with the Control board:

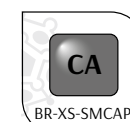
- **DIRETTIVA 2014/30/UE (EMC)**
  - EN 50130-4:2011
  - EN 61000-6-3:2007+A1:2011
- **DIRETTIVA 2011/65/UE (ROHS)**
  - EN 50581:2012
- **CEI 79-2 (2ª Edition)**



### TECHNICAL FEATURES

- **DIMENSIONS:** 80 x 85 x 40 mm (L x H x D)
- **PACK DIMENSIONS:** - (L x H x D)
- **GROSS WEIGHT:** - g
- **NET WEIGHT:** - g
- **POWER SUPPLY:** through XS-CONTROLLER
- **CURRENT:** - mA (max)
- **OPERATIVE TEMPERATURE:** -25 ÷ +80 °C
- **RELATIVE HUMIDITY:** <95% non condensing
- **ANALYSIS CAPABILITY:** 1 SISMA CA or 1 SISMA CAPF sensor-module
- **INPUTS:**
  - 1 SISMA CA or 1 SISMA CAPF sensor-module
  - bus Xensity
- **CALIBRATIONS AND CONFIGURATIONS TROUGHT SERVICE SOFTWARE (XENSITY)**

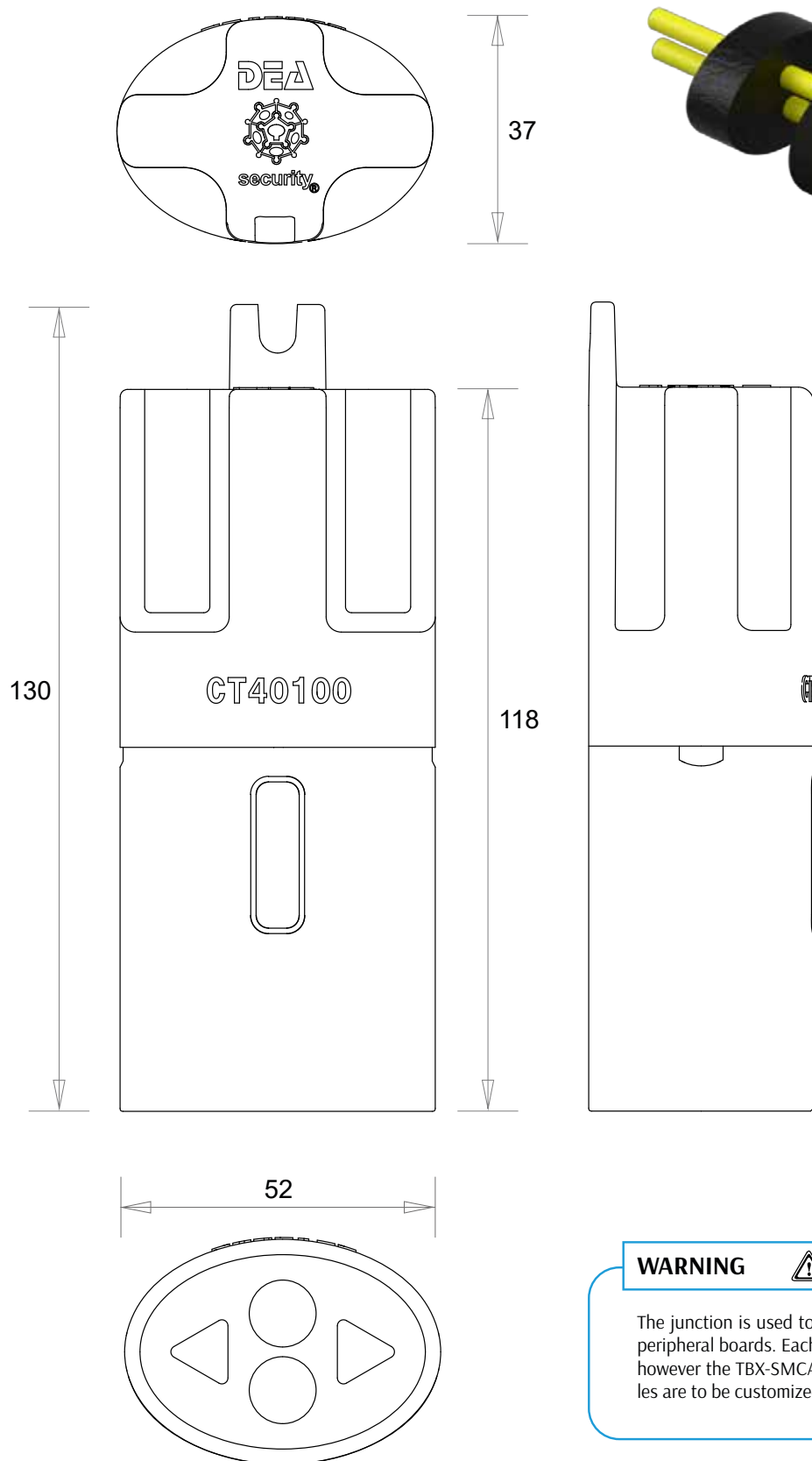
## PROJECT ICON



**XENSITY**  
Peripheral for SISMA CA  
p/n. **BR-XS-SMCAPU** Scale 1:1



© 2023 DEA Security S.r.l. v. 1.0.0  
DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.



#### WARNING



The junction is used to connect the sensor-modules to the processing or peripheral boards. Each module is equipped with a pre-wired termination, however the TBX-SMCA termination can be purchased if pre-wired modules are to be customized/divided in the field.

#### PROJECT ICON



#### TECHNICAL DATA

##### COMPLIANCE

In combination with sensor-modules:

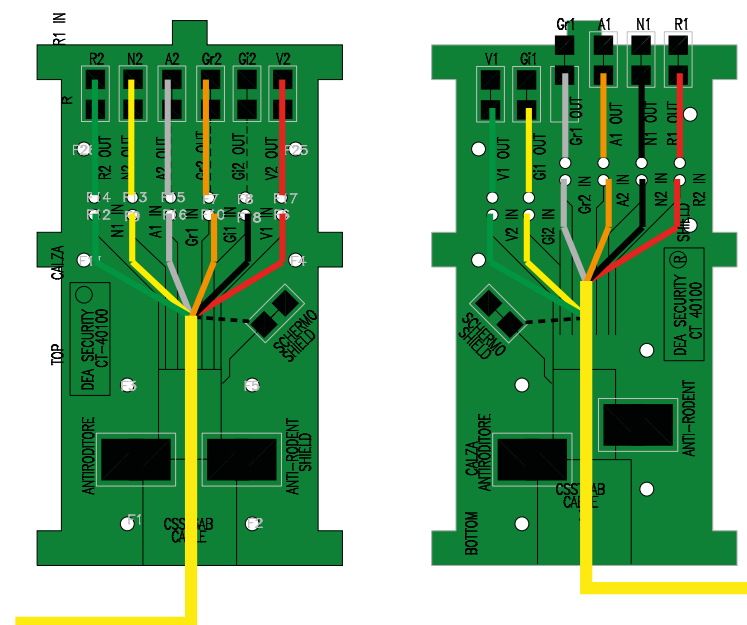
- **DIRECTIVE 2014/30/UE (EMC)**
  - EN 50130-4:2011
  - EN 61000-6-3:2007+A1:2011
- **DIRECTIVE 2011/65/UE (ROHS)**
  - EN 50581:2012



##### TECHNICAL FEATURES

- **ENVIRONMENTAL CLASS:** IV (in accordance with EN-50130-5 standard)
- **DIMENSIONS:** 52 x 37 x 133mm (W x H x D)
- **GROSS WEIGHT:** 93 g
- **NET WEIGHT:** 60 g
- **MATERIAL:** polyamide with added glass fibre PA6-GF30
- **BLACK:** colour
- **OPERATING TEMPERATURE:** -40 ÷ +80 °C
- **RELATIVE HUMIDITY:** 0 ÷ 100% (after sealing with RP-100 **RESIN**)

#### CONNECTIONS



SISMA CA / CAPF

Junction

p/n. JBX-SMCA

Scale 1:1

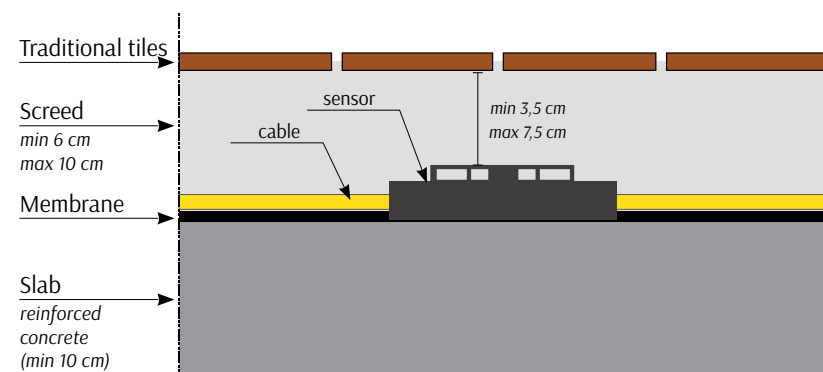


© 2016 DEA Security S.r.l. v. 1.0.0

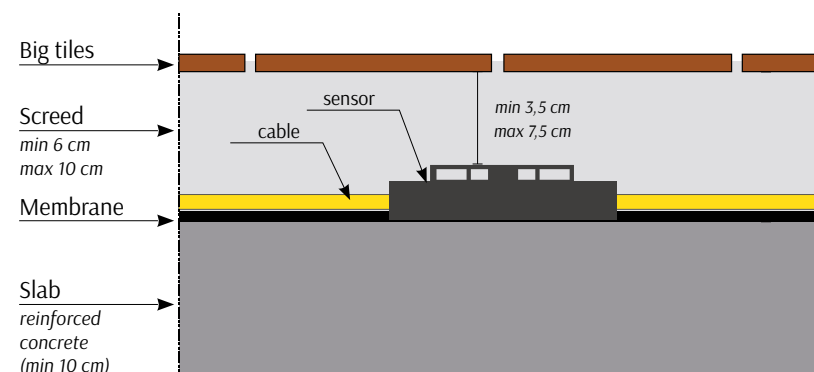
DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.



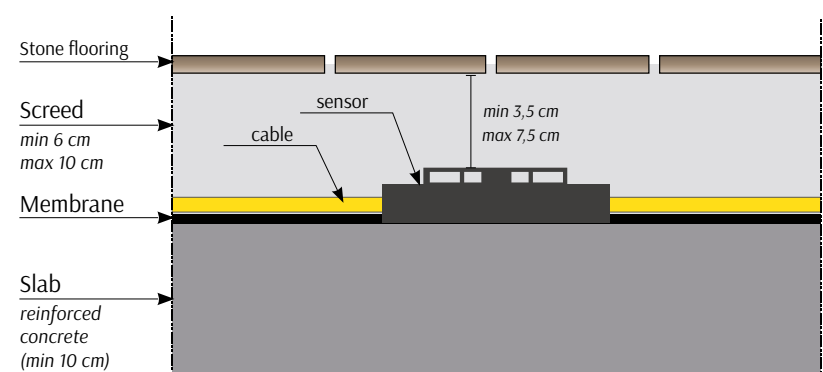
### TRADITIONAL TILE FLOORING



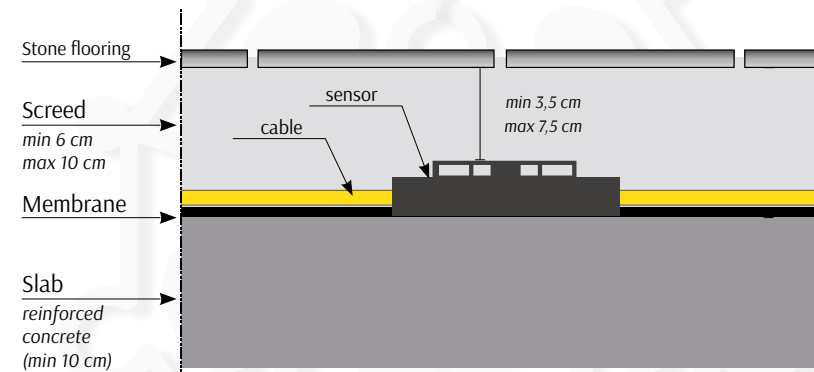
### BIG TILE FLOORING



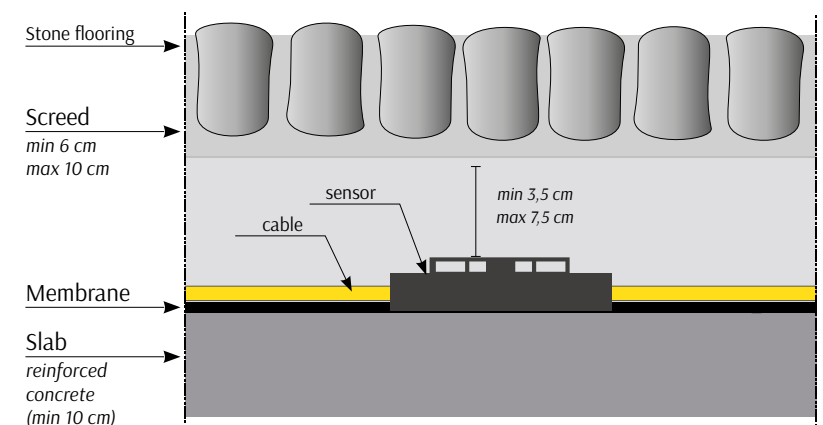
### STONE FLOORING



### STONE FLOORING (large slabs)



### PORPHYRY FLOORING



**SIGMACA**

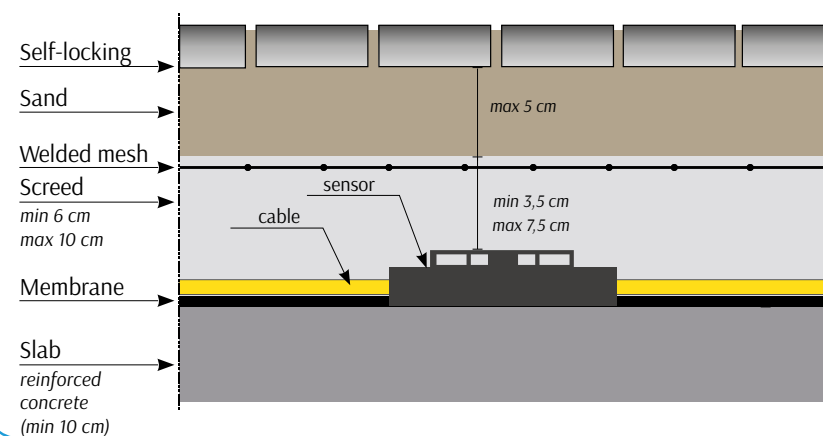
Flooring sections

SCHEMES OF INSTALLATIONS

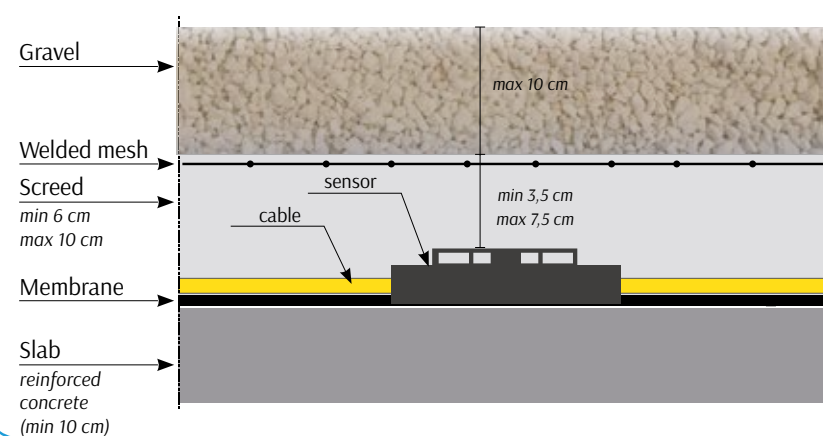


© 2023 DEA Security S.r.l. v. 1.0.0  
DEA Security srl reserve the right to change at any time and without notice the features of its products.

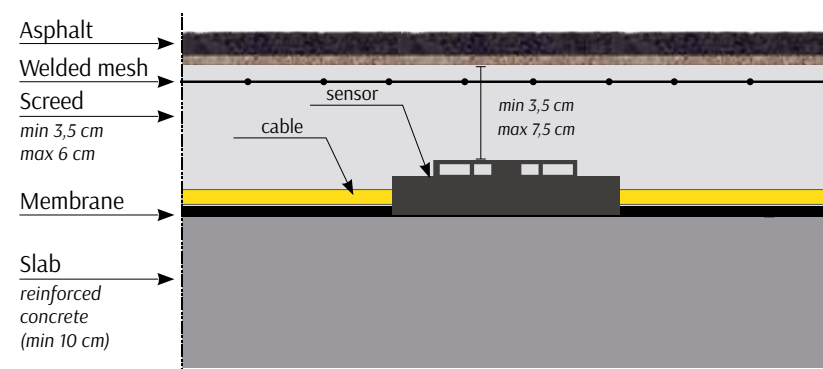
### SELF-LOCKING PAVING



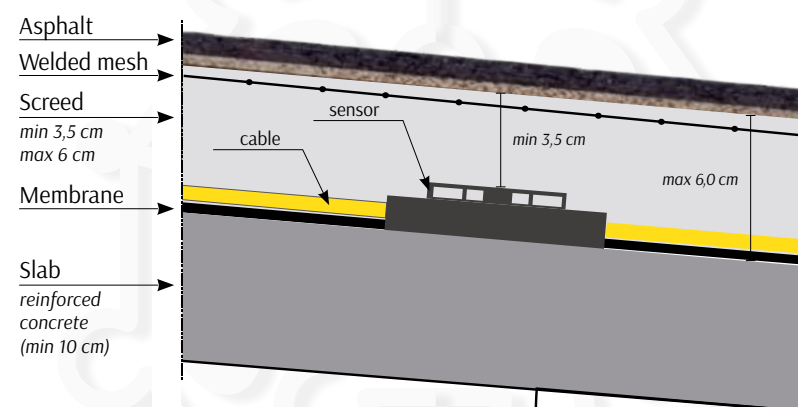
### COVERING with GRAVEL



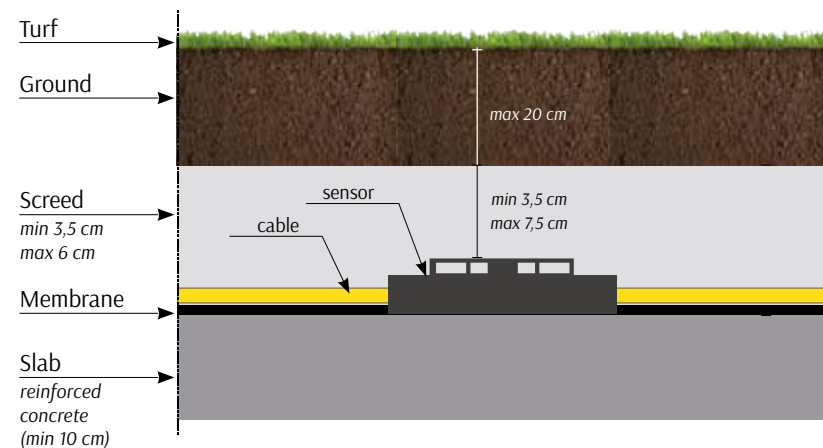
### ASPHALT



### ASPHALT COATING on INCLINED PLANE



### GROUND



**SIGMACA**

Flooring sections

SCHEMES OF INSTALLATIONS

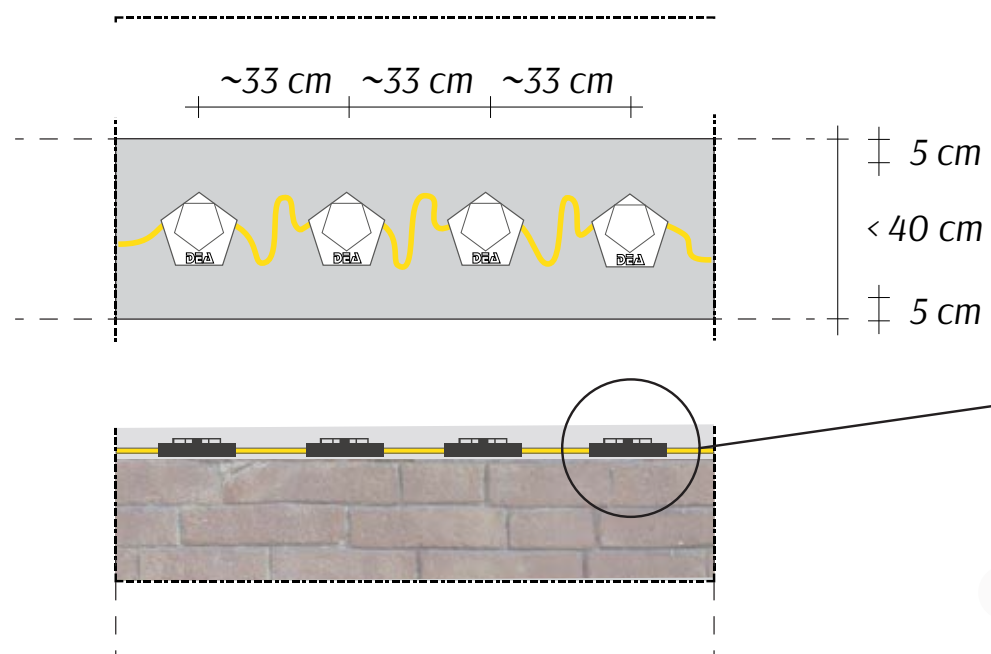
**DEA**



SECURITY®

© 2023 DEA Security S.r.l. v. 1.0.0  
DEA Security srl reserve the right to change at any time and without notice the features of its products.

### WALL with THICKNESS <40 cm



### INSTALLATION

In this case, the sensors will be laid in line along the wall and not as the classic sensor-modules are installed. To allow maximum effectiveness in terms of coverage, it is necessary to have 3 sensors every metre. Furthermore, if the wall is less than 40 cm thick, the use of the elastomeric membrane is not necessary.

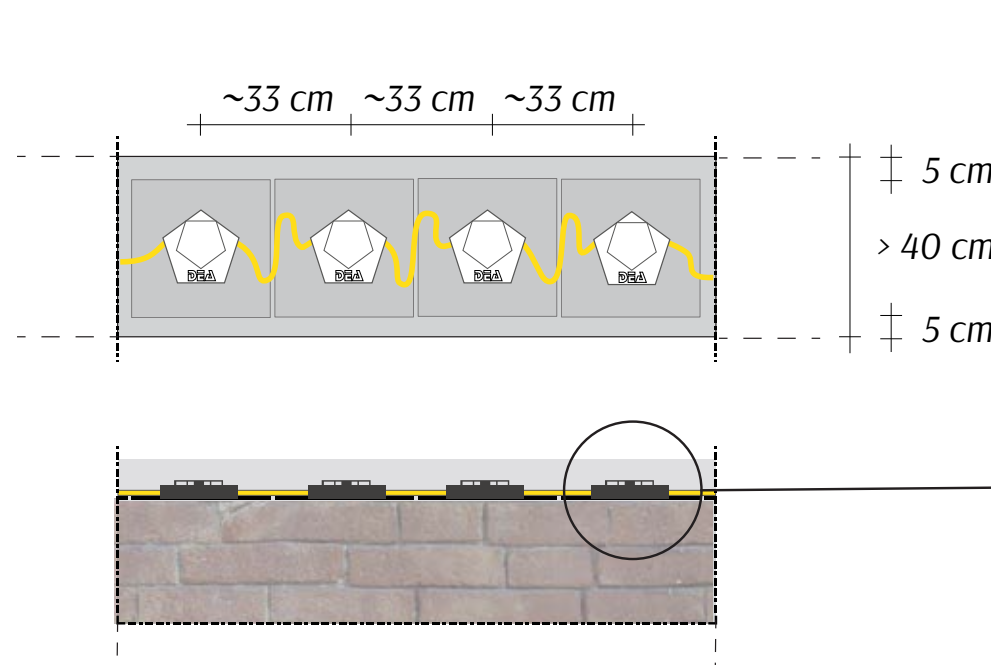
If the SISMA CA system is installed on walls with thickness greater than or equal to 40 cm, it is necessary to proceed with the installation of the elastomeric membrane, previously cutting it to a width equal to that of the wall minus 10 cm, thus leaving 5 cm on each side.

### WARNINGS



In any case, the sensor must be covered with a maximum thickness of concrete (screed) of 2 cm. Considering the fact that the thickness of the sensor is about 2.5 cm, an operating dimension of 4.5 cm will be reached, referred to the sensor support base.

### WALL with THICKNESS >40 cm



**SISMA CA**

Protection of walls

APPLICATIONS

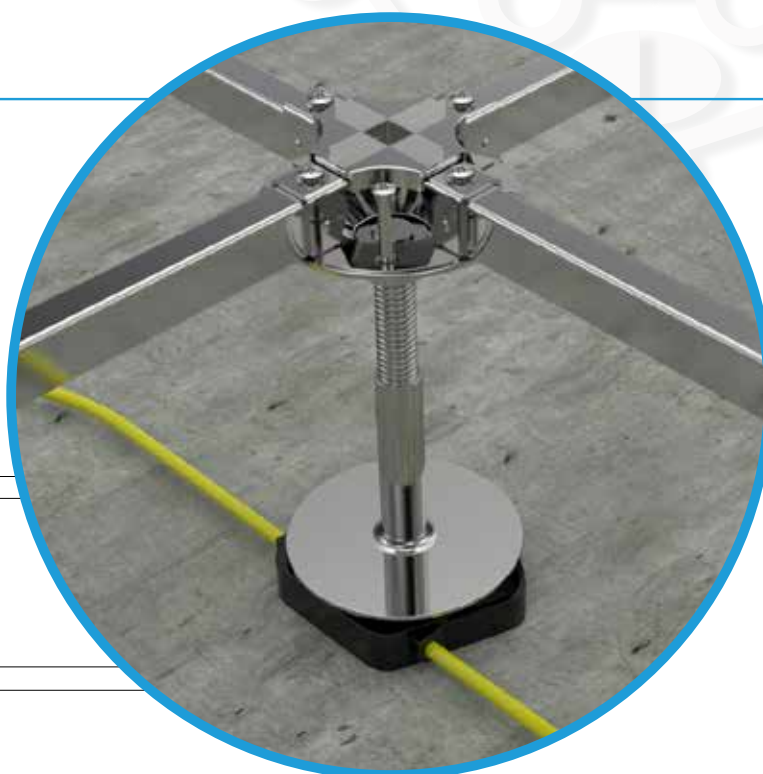
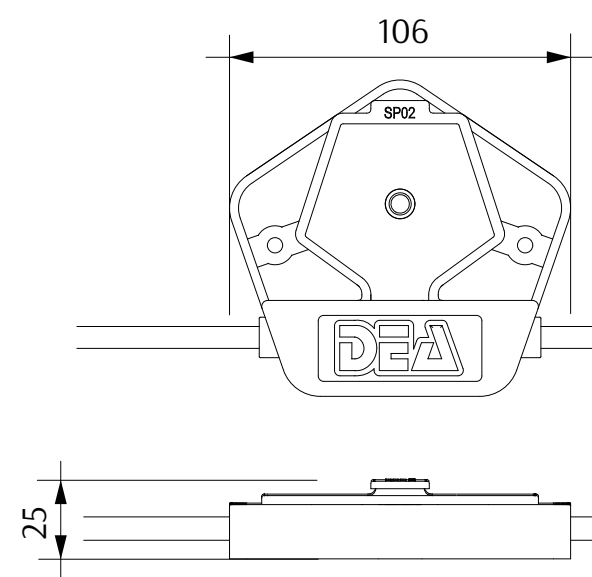
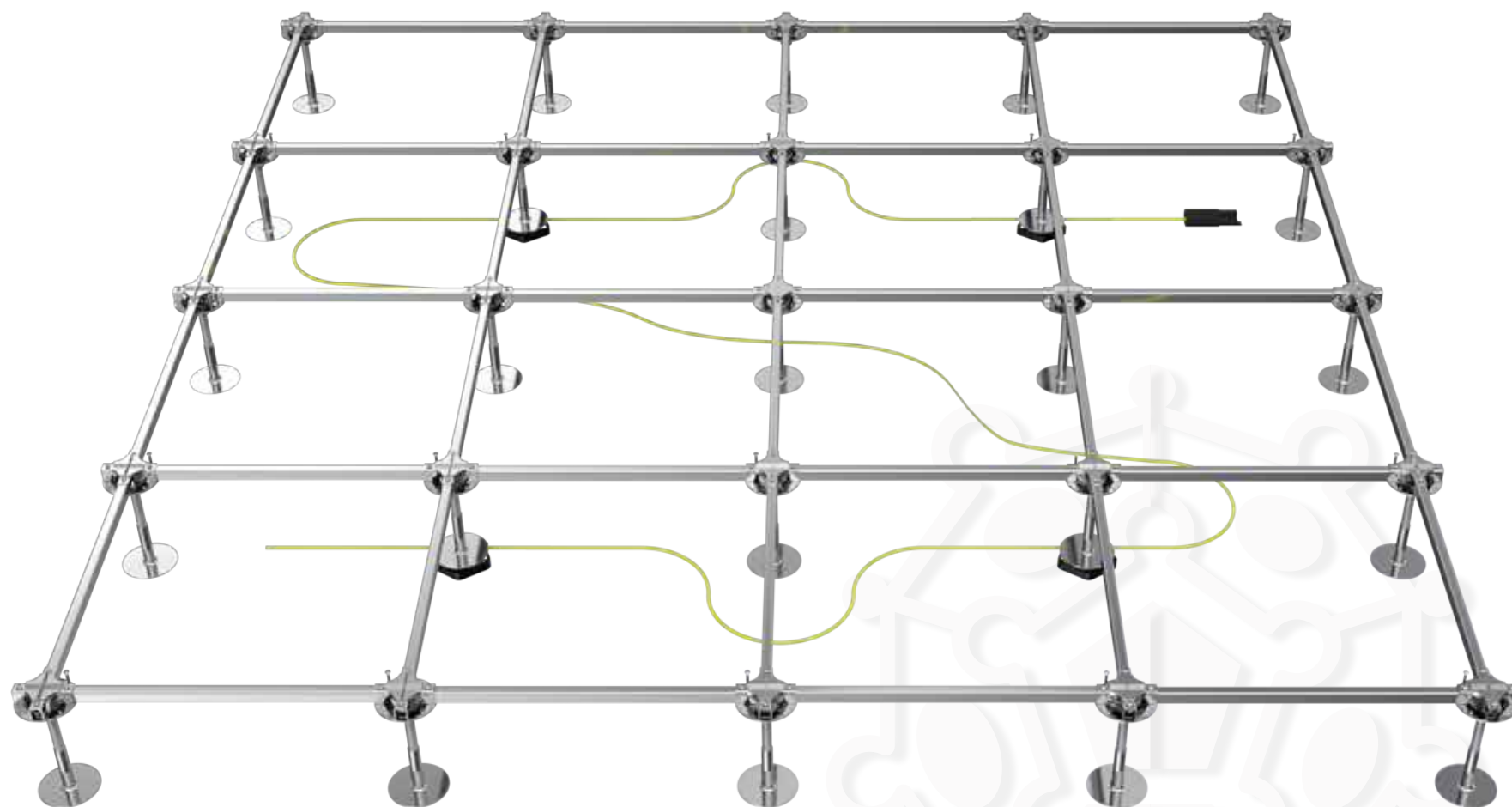


© 2023 DEA Security S.r.l. v. 1.0.0

DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.



## FLOATING FLOORING



# SIGMACAPF

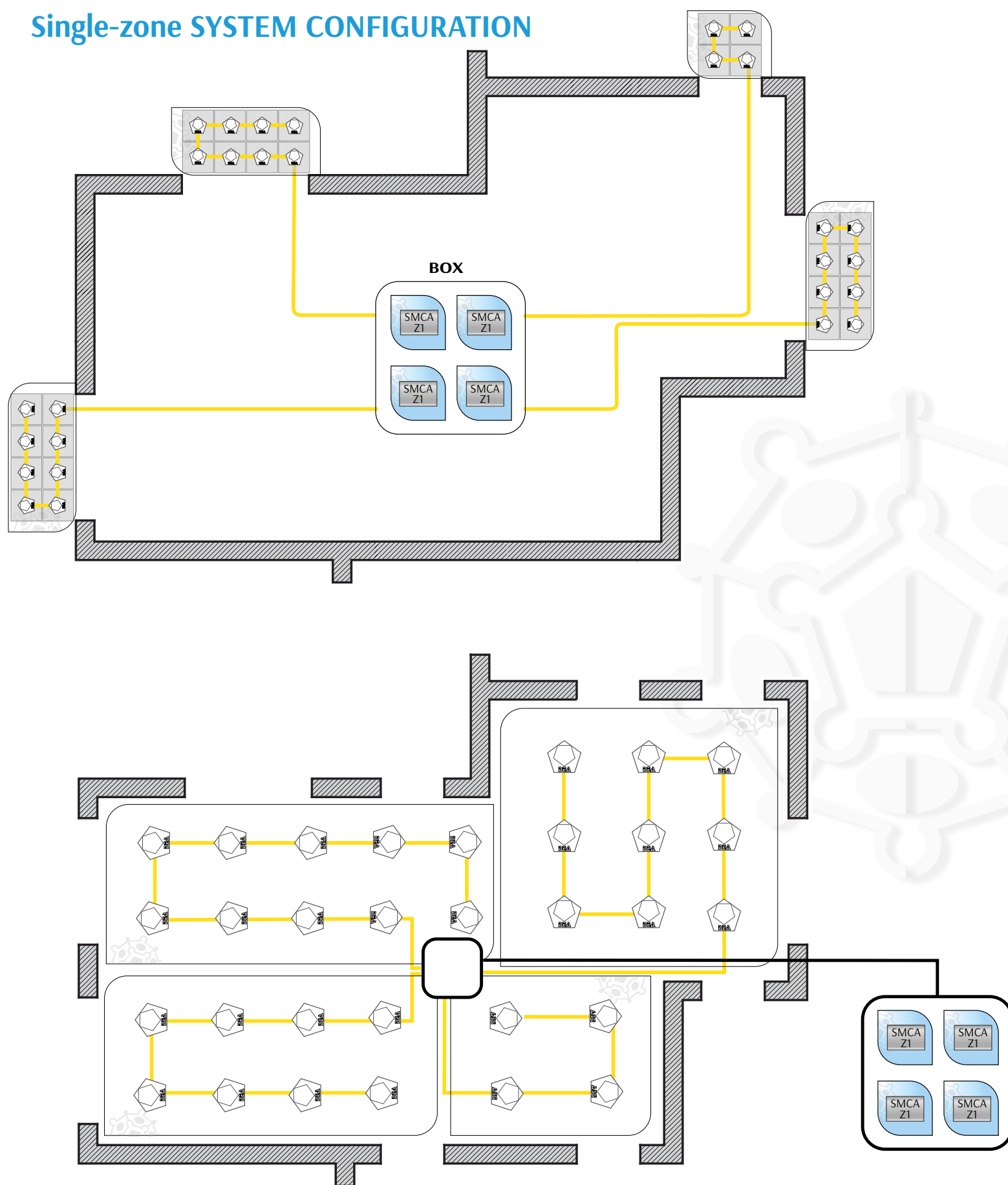
Sensor module for raised floors

## APPLICATIONS



© 2023 DEA Security S.r.l. v. 1.0.0  
DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.

## Single-zone SYSTEM CONFIGURATION

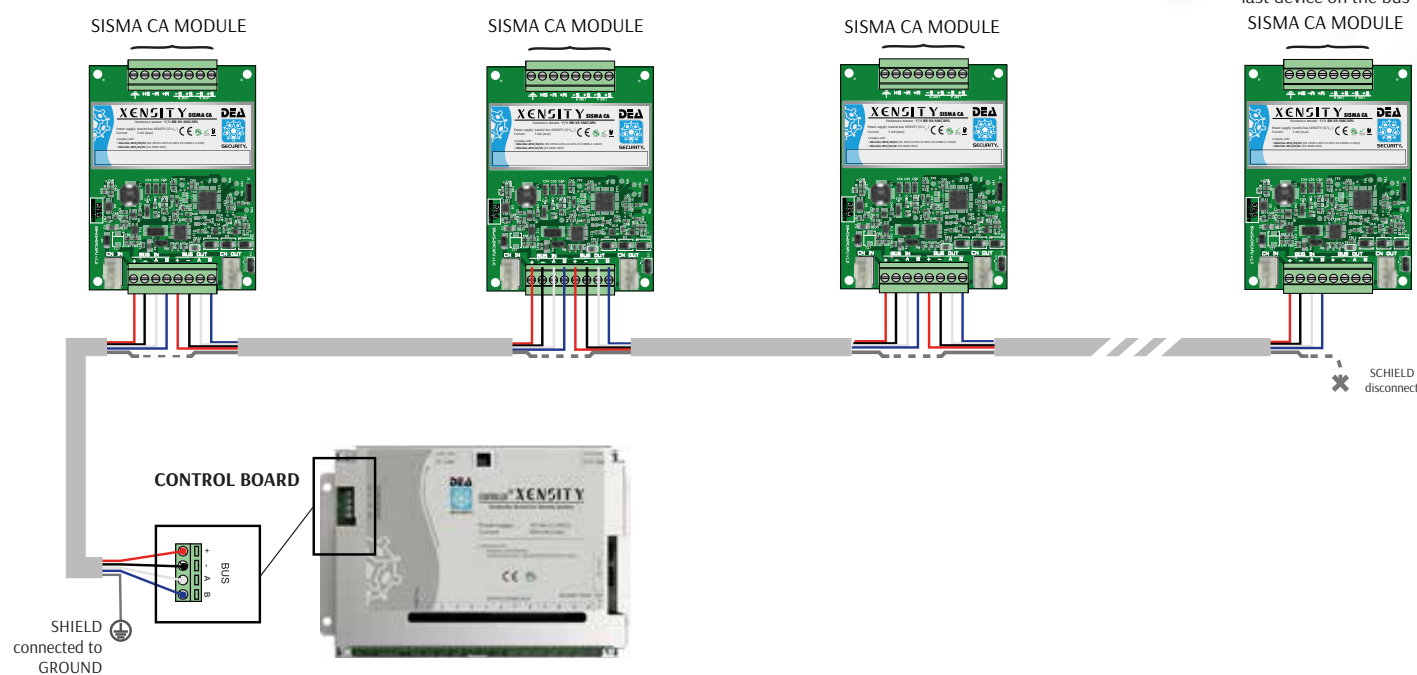
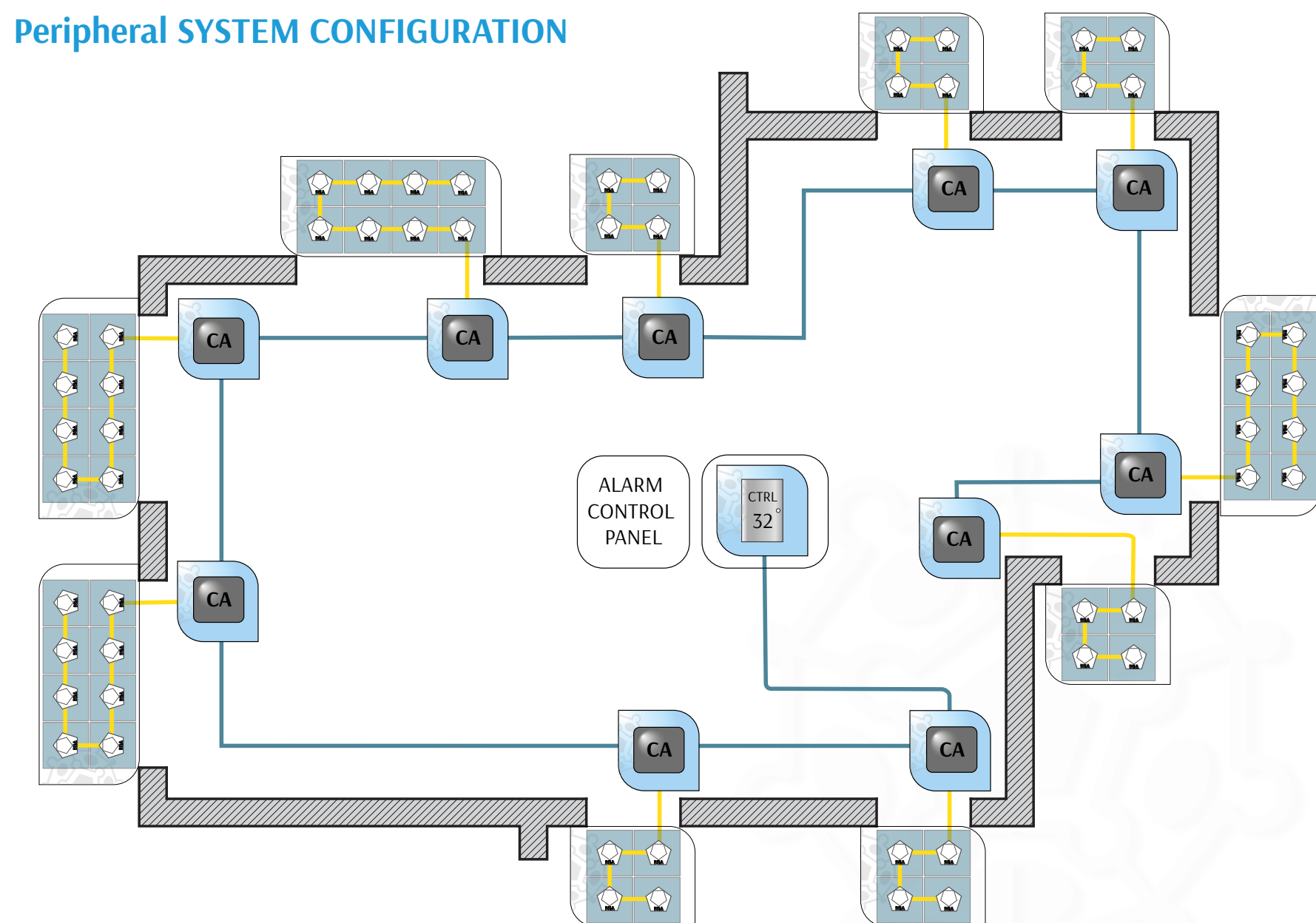


**SISMACA/CA/PF**  
Single zone system  
**CONFIGURATIONS**



© 2023 DEA Security S.r.l. v. 1.0.0  
DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.

## Peripheral SYSTEM CONFIGURATION



# SISMA CA

SMCAPU in bus

## CONFIGURATIONS

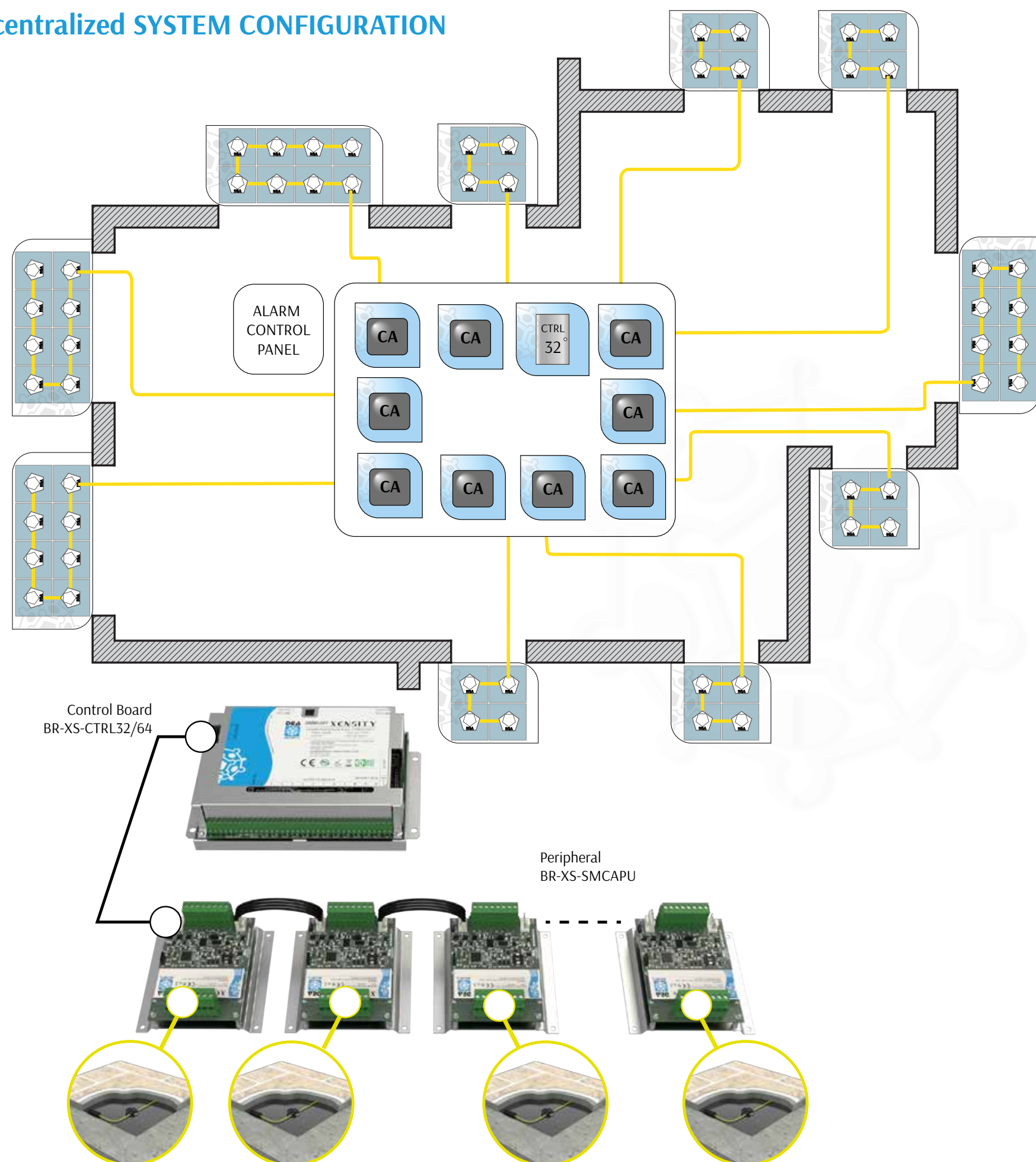


© 2023 DEA Security S.r.l. v. 1.0.0

DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.



## centralized SYSTEM CONFIGURATION

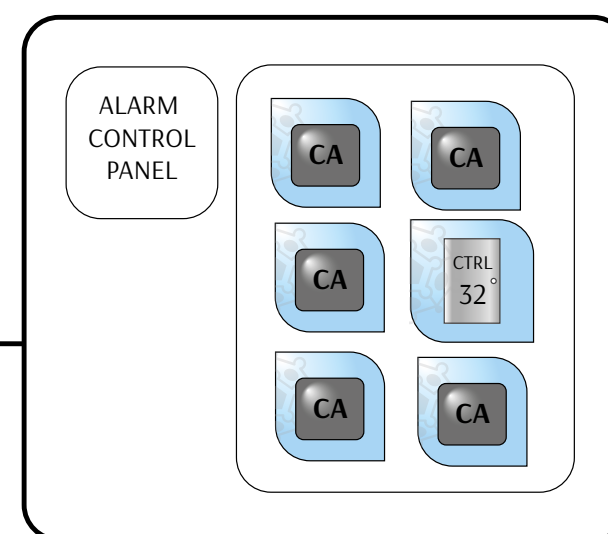
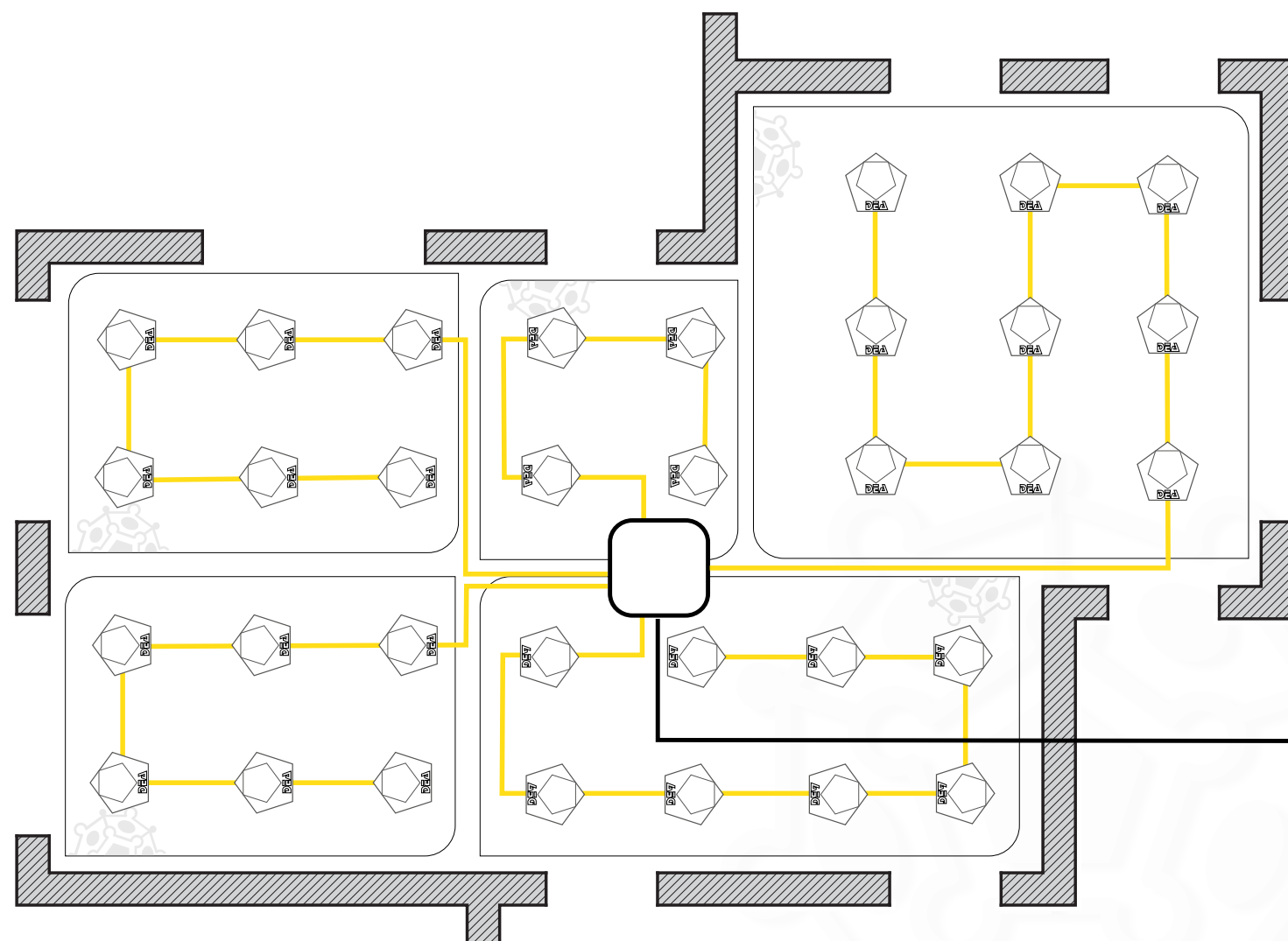


**SIGMACA**  
SMCAPU in central cabinet  
CONFIGURATIONS



© 2023 DEA Security S.r.l. v. 1.0.0  
DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.

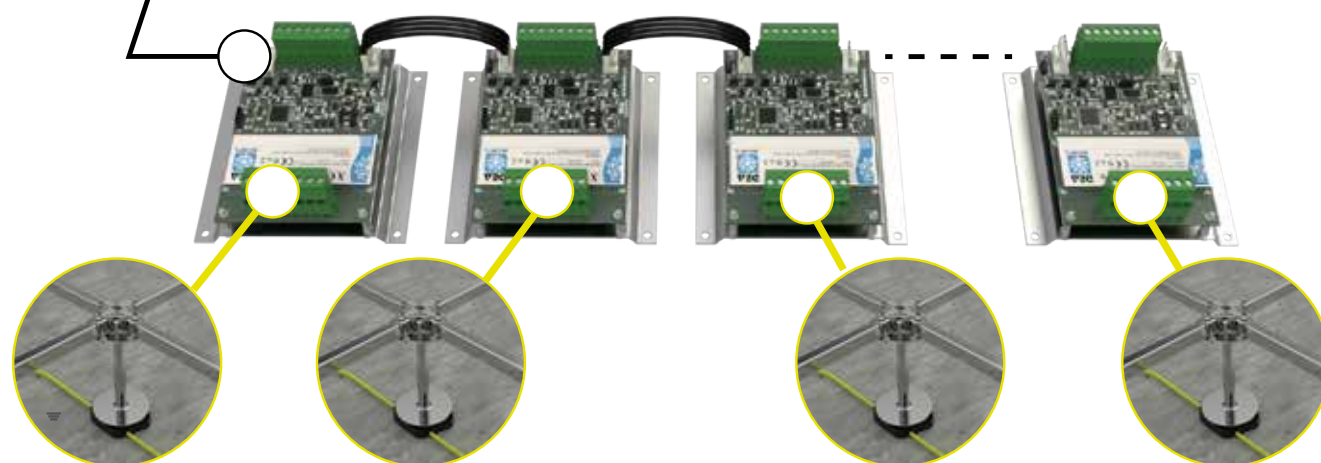
## centralized SYSTEM CONFIGURATION



Control Board  
BR-XS-CTRL32/64



Peripheral  
BR-XS-SMCAPU



**SIGMACAPF**  
SMCAPU in central cabinet  
CONFIGURATIONS

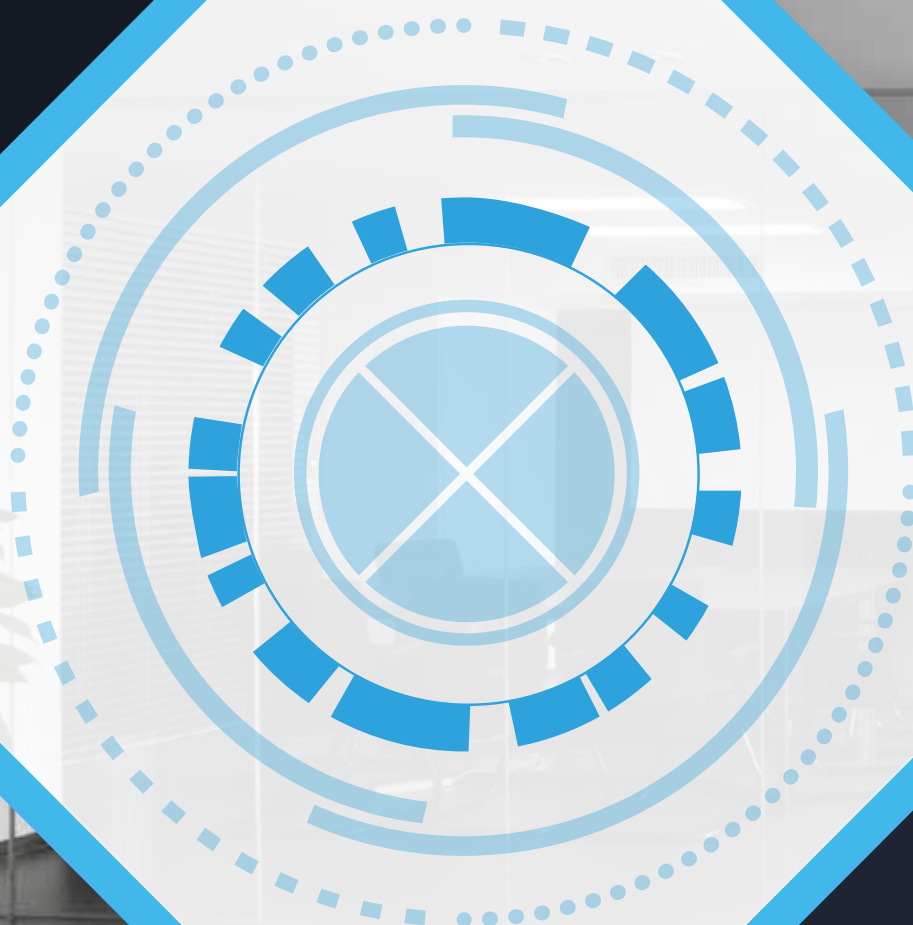


© 2023 DEA Security S.r.l. v. 1.0.0  
DEA Security S.r.l. reserves the right to vary the information and technical characteristics contained herein at any time and without notice.

**DEA**



**SECURITY®**



**DEA Security S.r.l.**

Via Bolano, snc - 19037 Santo Stefano di Magra (SP)

tel. +39 0187 699233 - fax +39 0187 697615

VAT NO.: IT00291080455

[www.deasecurity.com](http://www.deasecurity.com) - [dea@deasecurity.com](mailto:dea@deasecurity.com)

