



SINGLE-ZONE PROCESSING BOARD SISMA CP50



P/N BR-SMCP50-Z1, BR-SMCP50-Z1AP, BR-SMCP50-Z1AP-DN, BR-SMCP50-Z1AP-SA



DESCRIPTION

Electronic processing board which manages two SISMA CP 50 sensor-strings. The board amplifies, digitizes and analyzes the signals coming from the sensor-strings, discriminating the typical signals of an intrusion from those generated by environmental nuisances. The embedded memory allows you to record all the events detected by the sensor-strings, to help the customer to identify the cause of each potential alarm detected and to monitor the behaviour of the string.

BR-SMCP50-Z1 board has 3 relay outputs to signal the string Alarm status (1 NC), the string Tampering (1 NC) and low voltage condition (1 NC). The board can be managed over LAN / WAN, using RJ45 port or locally using USB port (type B). All the settings and configurations of the system are carried out using the service software provided for Windows.

The board can be connected to DEA NET communication network to allow the complete management of the board from a remote control room.



PACKAGE CONTENTS

In addition to this datasheet, the package contains No 2 ferrite cores, No BR-SMCP50-Z1, No 1 Mini Screwdriver.

COMPLIANCE

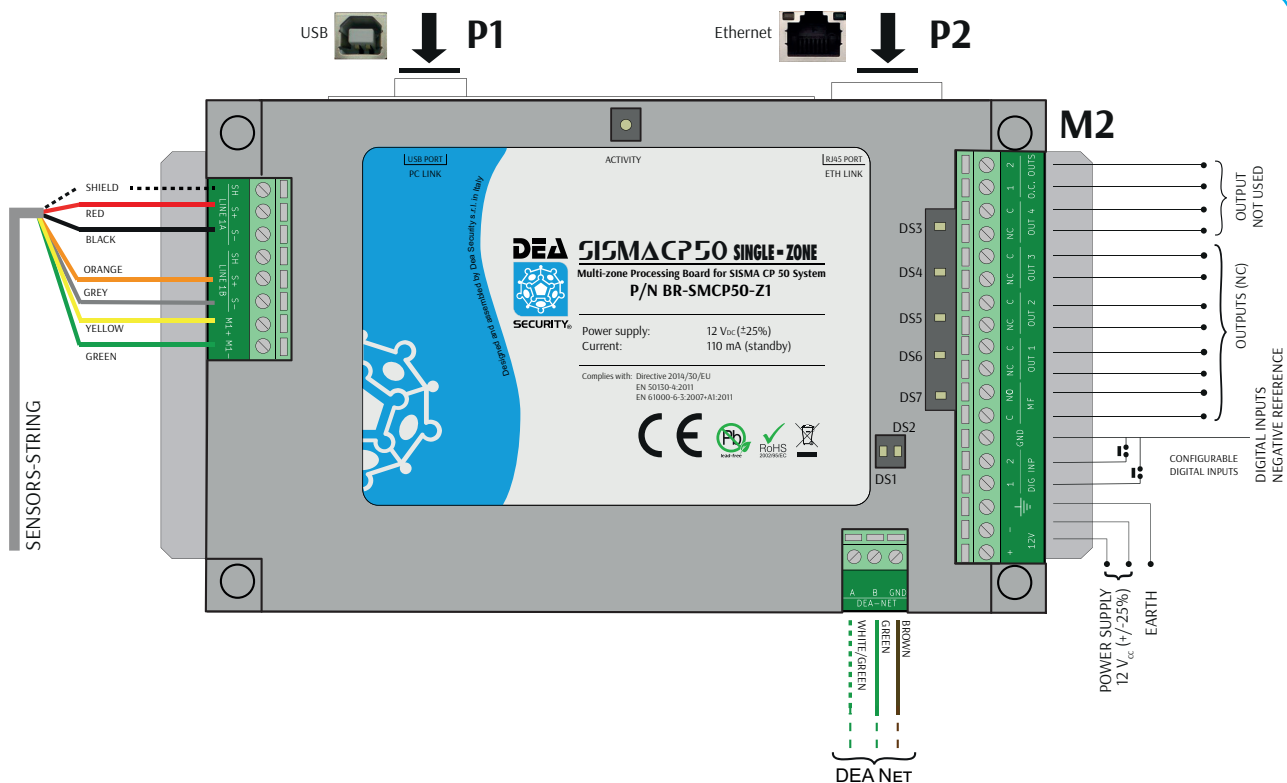
- Directive 2014/30/EU
- EN 50130-4:2011
- EN 61000-6-3:2007+A1:2011



TECHNICAL FEATURES

- DIMENSIONS:** 178 x 90 x 40 mm (L x H x W)
- PACKAGE SIZE:** n.d.
- GROSS WEIGHT:** n.d.
- POWER SUPPLY:** 12 V_{CC} (+/-25%)
- CURRENT:** 110 mA (max)
- OPERATING TEMPERATURE:** -25 ÷ +80 °C
- RELATIVE HUMIDITY:** <95% non condensing
- ALYSIS CAPABILITY (EACH LINE):** 56 SMCP50 sensors
- ANALOG INPUTS:** 1 sensor-string with resistor balancing
- DIGITAL INPUTS:** 2 Opto-isolated, configurable by software
- NC RELAY OUTPUTS (POSITIVE SECURITY):**
 - 1 Alarm from sensor-strings
 - 1 for sensor-string tampering
 - 1 Low Battery, Service Activity and No Operative software
- COMMUNICATION INTERFACE:**
 - USB port (PC link)
 - ethernet port (RJ45)
 - bus DEA NET
- CALIBRATION, SETTINGS AND EVENTS MANAGEMENT USING SOFTWARE**
- CPU:** 32 bit, 168 MHz
- EVENTS MEMORY:** more than 20.000 events
- SERVICE SOFTWARE LICENCE INCLUDED**

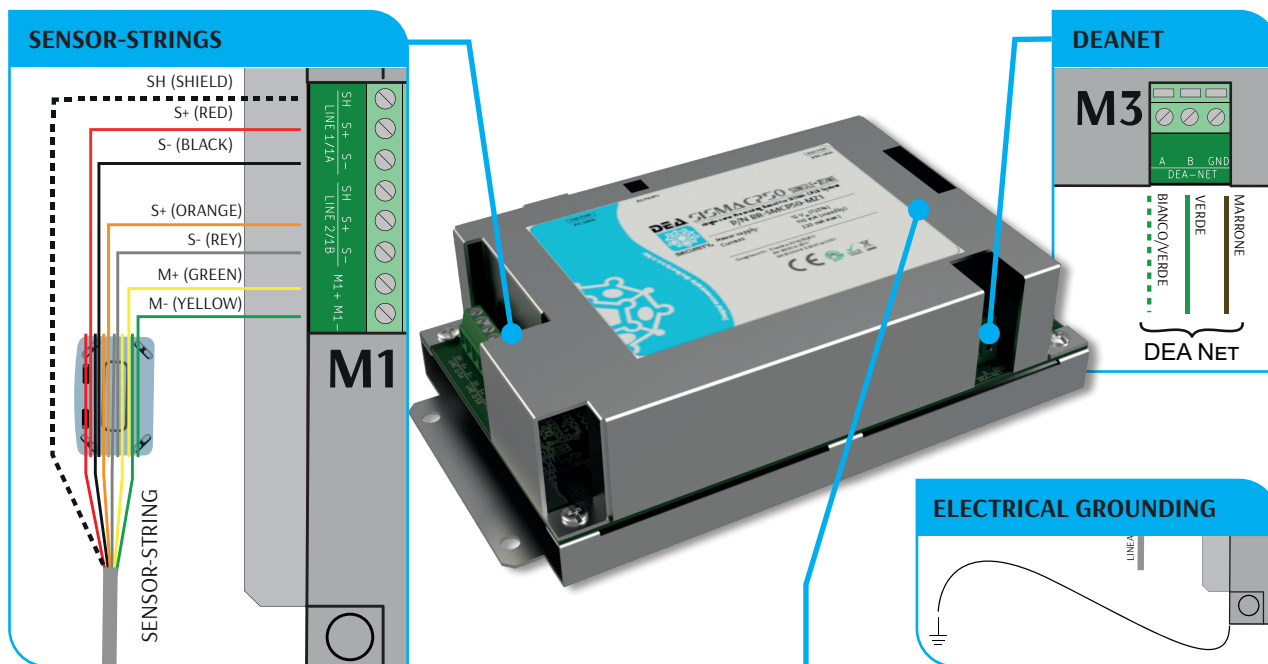
GENERAL SCHEME



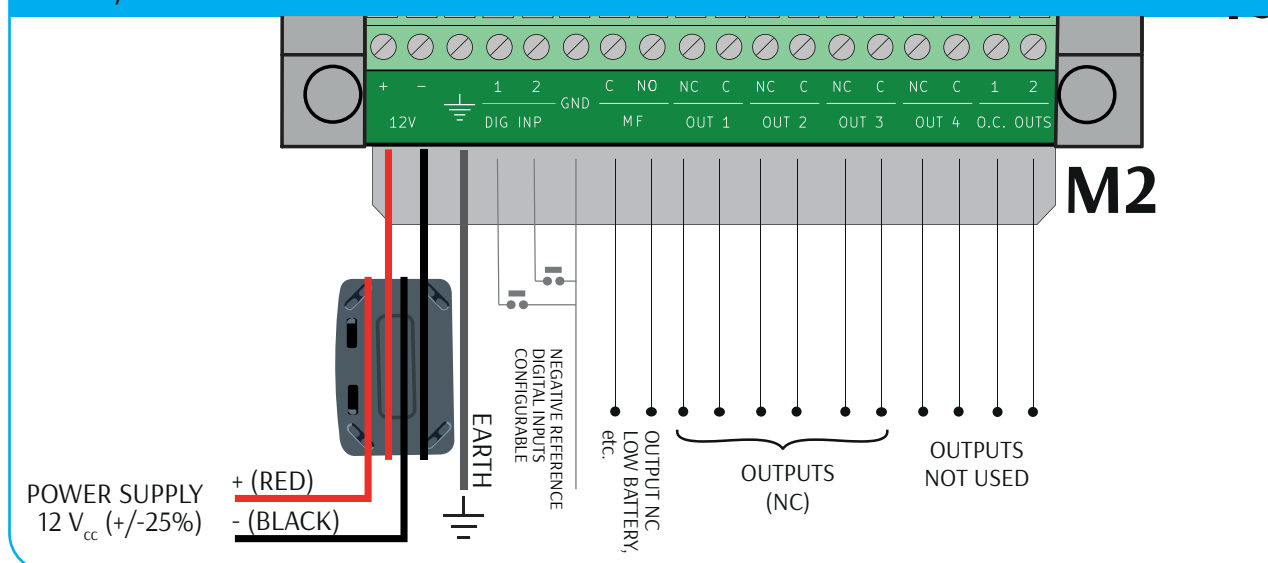


CONNECTIONS

For the sensor string connection, use only cable model CV-SMCP50. All the initial string junctions, the intermediate junctions and the terminations must be soldered and placed inside a special box (JBX-SMCP50-ILT, JBX-SMCP50, TBX-SMCP50) sealed with PUR cast resin (RP-100).



INPUTS / OUTPUTS



■ SENSOR-STRINGS (TERMINAL BLOCK M1)

The sensor strings must be connected to M1 terminal block. Connect wire to S+, black to S- and cable shield to SH of LINE 1A. Repeat the process for LINE 1B connecting orange wire to S+, grey to S-. Connect yellow wire to M1+ and green M1-. The maximum distance between the processing board and the first sensor of the string is 150 meters.

■ POWER SUPPLY & GROUNDING (TERMINAL BLOCK M2)

The Board supply voltage is 12Vdc, power failure condition is signaled opening MF relay and turning off led DS7 (in accordance with the positive security concept). The use of linear power supply unit is recommended such as AL-DN-DEAPW (alternatively AL25 or AL35). If the base plate of the peripheral cabinet containing the processing boards is made of insulating material or is not grounded, the metallic case of the board must be grounded directly. A standard yellow/green earth cable is provided.

■ INPUTS/OUTPUTS (TERMINAL BLOCK M2)

The Board has two configurable digital inputs (GND referenced) and Outputs:

- **MF (POWER FAIL)** - Low supply voltage, service activity connected using software and no operative software present;
- **OUT1** - Intrusion Alarm;
- **OUT2** - Tamper Alarm;
- **OUT3** - Prealarm;
- **OUT4, OC 1 e 2** - not used

■ DEANET BUS (TERMINAL BLOCK M3)

The connection of the processing board to DEANET communication network is made through M3 terminal block. If the board is the last on BUS DEANET line, it is necessary to close the jumper JP1, to insert the end of line termination.

N.B.

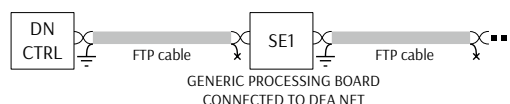
THE CABLE SHIELD OF THE STRING MUST BE CONNECTED TO THE SH TERMINAL OF CORRESPONDING LINE.

N.B.

THE WIRES OF THE SENSOR-STRING MUST MAKE A TURN AROUND THE FERRITE CORE NEAR THE TERMINAL BLOCK TO IMPROVE ELECTRO-MAGNETIC NOISE IMMUNITY.

N.B.

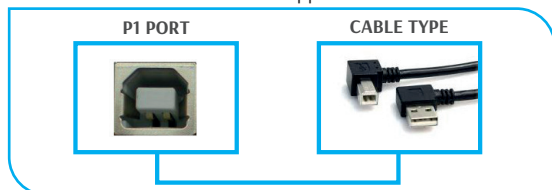
ONLY ONE END OF THE FTP CABLE SHIELD MUST BE GROUNDED, THE OTHER END MUST BE LEFT UNCONNECTED.



PC-LINK (P1 PORT) - WAN/LAN CONNECTION (P2 PORT)

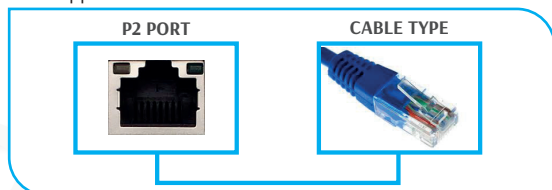
The following connection ports are available on the board:

- P1 port** (USB type B) is used for service activities by means of a connected PC and a software supplied.



- P2 port** (ethernet) is used for connecting SISMACP50 system to LAN/WAN network, using TCP/IP protocol, for the following applications:

1. DEA MAP supervision software integration;
2. third-party Video surveillance system integration (using Plugin);
3. third-party Software integration (using dynamic library SW-DM-DLL);
4. service Activity by means of a connected PC and a software supplied.



LED STATUS

The Table shows all the LED description:

LED	SIGNAL	COLOUR
(DS7)	- ON: Normal status - OFF: Power Fail (Power Supply < 8.5V) or Service Activity with PC connected and software started or no board operative software uploaded	GREEN
(DS6)	INTRUSION ALARM	RED
(DS5)	TAMPER	RED
(DS4)	PREALARM	RED
(DS3)	not used	RED
(DS1)	DEANET TX- Data Transmission	RED
(DS2)	DEA NET RX- Receiving Data	GREEN
Activity	NORMAL ACTIVITY (Blinking)	GREEN

SERVICE SOFTWARE

Download service from the DEA Security website, using the following credentials:

- Username(*deasecurity*) and password (*deaservice*).

TO USE SERVICE SOFTWARE YOU MUST DOWNLOAD THE FILE SW-SERVICE_BR-SMCP50-Z1.ZIP FROM THE FOLLOWING LINK
<https://www.deasecurity.com/shorturl/13>

CONFIGURATION AND CALIBRATION

1. PRELIMINARY OPERATIONS

The configuration and calibration of the processing board are made using the software supplied by DEA Security.

Connect the computer to the board using USB or ETHERNET cable (default Board IP Address: 192.168.0.10). Make sure that the processing board is powered on and then start the software.

2. LOGIN SERVICE SOFTWARE

Once the program has started, log in (default - username: *installatore*, password: *dea*).

N.B.

PLEASE PAY ATTENTION TO THE USE OF THE CAPITAL LETTERS: "dea" IS DIFFERENT FROM "Dea" OR FROM "DEA"

3. MAIN WINDOWS

- View Log:** upload event files (file name.fgs), previously downloaded.

Options:

- you can set connection parameters (serial port);
 - select interface language (italian, english, spanish);
 - change the login password (instead of "dea").
- Board Connection:** start the communication with the board.
- Close:** to Exit the software.

4. BOARD CONNECTION

Select the type of connection with the board (USB port, Ethernet port (UDP) or (TCP) and the board password will be requested (default: 123456).



IN CASE THE NEW PASSWORD WILL BE FORGOTTEN, IT WILL NOT BE POSSIBLE, IN ANY WAY, TO ACCESS THE BOARD.



N.B.

IF THE USB PORT IS USED, CONNECT THE CABLE ONLY AFTER TURNING ON THE PROCESSING BOARD.

5. SENSITIVITY CALIBRATION

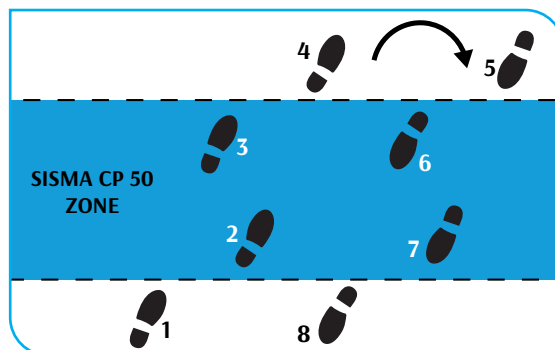
Once the main Windows appear you can proceed with sensitivity calibration.

N.B.

IF NO FORM IS SHOWN, MAKE SURE YOU HAVE INSERTED THE RIGHT PASSWORD, SELECTED THE CORRECT PORT OR INSERTED THE RIGHT BOARD IP ADDRESS, OR THAT THE CONNECTION CABLE IS COMPLIANT TO THE PREVIOUSLY SHOWN FIGURE.

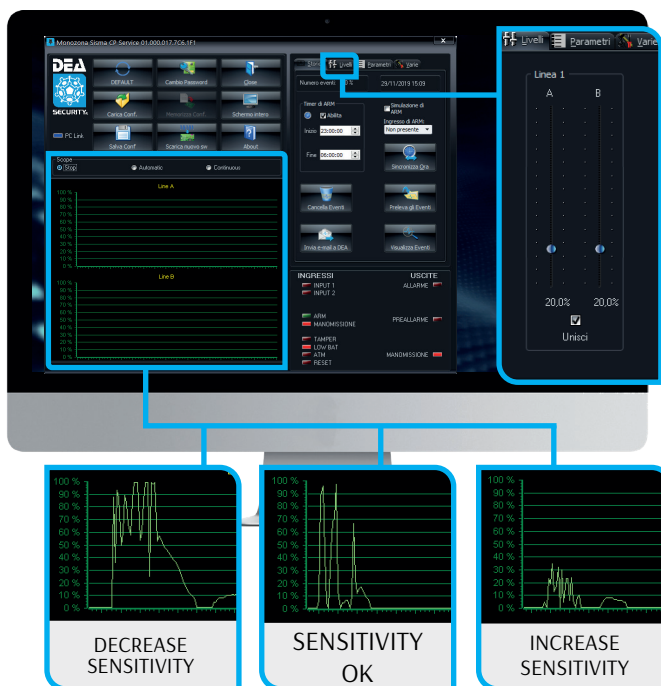
Below the steps to calibrate the board sensitivity:

1. From the section **Monitor**, select **Continuous**;
2. set sensitivity to 20 (of the zone interested);
3. Cross the zone obliquely respect to its direction, taking normal steps and positioning the feet as shown in the figure. The numeric sequence indicates the temporal sequence in which the steps must be taken;



4. Compare the signal acquired with the picture below and calibrate the sensitivity to get a similar waveform;

5. Repeat from the operation 2 until you obtain a signal similar to the one visible in the centre of the picture below;



6. Press **Save Conf** button to store the new settings. ;
7. From the main window it is possible to set the sensitivity level of the two lines, independently and on a scale from 0 to 100 (0 = minimum, 100 = maximum). There are 3 security levels:
 - **security level 1:** high security
 - **security level 2:** medium security
 - **security level 3:** low security

8. STORING CONFIGURATION

At the end of configuration of the system we recommend to save the configuration to a file:

1. Press the button **Save Configuration** and in the box File name: type a name for example "Calibration Site X - DATE".
2. Once the name has been typed, press the button **Save**.

N.B.

ONCE FINISHED CONFIGURATION AND CALIBRATION , REMEMBER TO CLICK ON SAVE CONFIG. BUTTON SO ALL THE CHANGES WILL BE STORED THE PROCESSING BOARD PERMANENTLY, OTHERWISE ALL THE CHANGES WILL BE LOST IN CASE OF POWER OFF.

N.B.

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

DEA Security S.r.l.

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