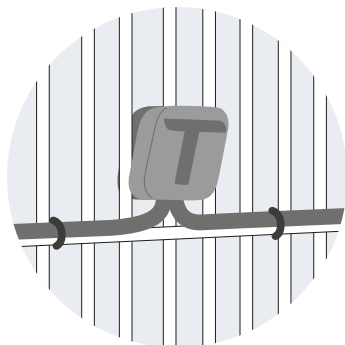


MACS

Installation instructions

MACS_installation_en_v1.0

01-2019 © 2019 TSec SpA

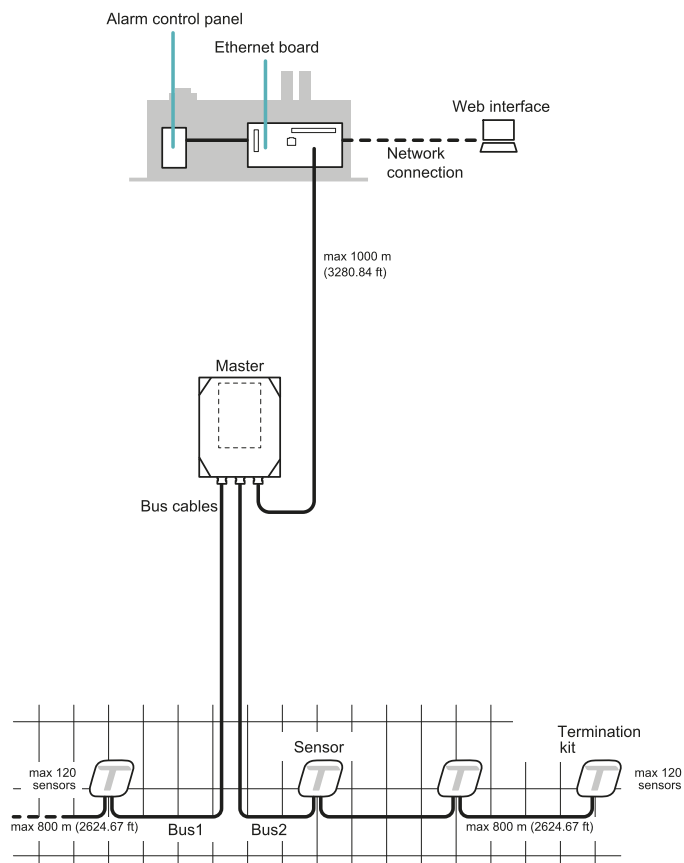


TSec SpA

Via Gavardina Traversa I, 74
25081 Bedizzole (BS)
Italy

www.tsec.it
info@tsec.it
+39 030 57 85 302

MACS system



Package contents

Sensor package

- Pre-wired sensor chains
- For each sensor:
 - long and short screw
 - counter-plate
 - T-cap
 - spacer
- These instructions

Master package

- Circuit board in watertight case
- Four screws per cover

Ethernet board package

MACS-ETH:

- Circuit board with support for DIN rail
- DIN rail
- Magnet

MACS-ETH-PS:

- Circuit board in metallic box with wired power supply unit (input: 230 V ac)
- Magnet
- Buffer battery (optional)
- Installation instructions

Material excluded

- Bus cable for connection of the Ethernet board and Master and for prolonging the intervals between sensors.
- Termination kit.
- Possible cable joining kit.
- Possible self-drilling screws for installation of sensors on pole.
- Ethernet cable to connect the Ethernet board.

Spare parts and accessories

For orders and consulting the spare parts and accessories catalog, contact the local distributor or manufacturer.

Disposal



As specified by the European Directive 2012/19/EU, never dispose of the product as standard urban waste.

The owner is responsible for disposing both these products and any other electronic or electrical equipment via the specific waste collection centers as specified by the government or local public authorities.

Correct disposal and recycling will contribute to the prevention of potentially harmful consequences for the environment and personal health.

To receive more detailed information about disposal, contact public authorities, waste management services or the representative from whom you purchased the product.

Install the sensors

Installation precautions

- Install the sensors with the cable outlet hole turned downwards.
- Perform the cable joints with special care. The system reliability depends on it. Refer to the instructions provided with the cable joining kit.



To configure the system:
MACS Instruction manual

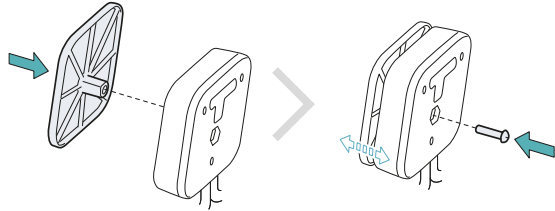
To join the cables:
Joining kit Installation instructions

To install the termination kit:
Termination kit Installation instructions

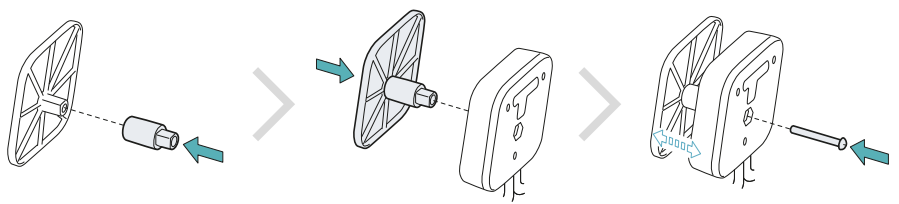


www.tsec.it

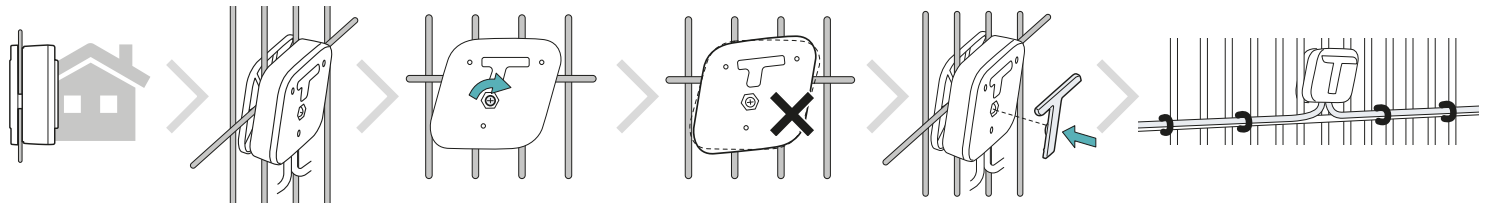
Prepare the sensor for thin mesh panels



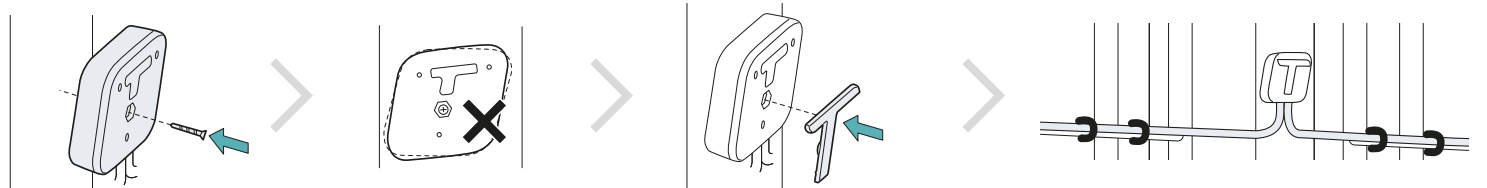
Prepare the sensor for thick mesh panels



Install the sensors on the panel



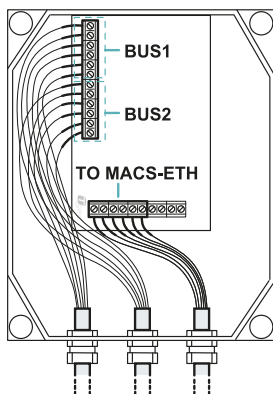
Install the sensors on the pole



Install the Master

Warnings

NOTICE: to guarantee the protection degree of the watertight case, do not perforate the box during installation. Use the dedicated holes for fastening to the wall. Use cable glands mounted on the box to connect the bus cables to the Master.



BUS1 and BUS2

| Terminal | Description | Wire color |
|----------|-----------------------------|------------|
| SH | Bus cables of sensor chains | Shield |
| C | | Orange |
| B | | Green |
| A | | Yellow |
| - | | Black |
| + | | Red |

TO MACS-ETH

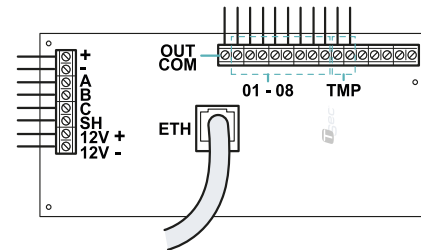
| Terminal | Description | Wire color |
|----------|--------------------------------------|------------|
| SH | Bus cable towards the Ethernet board | Shield |
| C | | Orange |
| B | | Green |
| A | | Yellow |
| - | | Black |
| + | | Red |
| IN | Not in use | - |
| OUT | Generic alarm output | - |

Install the Ethernet board

Warnings

NOTICE: only for MACS-ETH, install the Ethernet board in a dedicated box.

NOTICE: install the box in a covered, protected area to prevent damage to the components.



| Terminal | Description | Wire color |
|------------------------|-----------------------------------|------------|
| OUT COM | Common mode output | - |
| 01-08 | Alarm outputs for the eight zones | - |
| TMP | Tampering alarm output | - |
| IN COM, I1, I2, I3, I4 | Not in use | - |
| - | Bus cable towards the Master | Black |
| + | | Red |
| A | | Yellow |
| B | | Green |
| C | | Orange |
| SH | | Shield |
| 12 V + | System power supply | - |
| 12 V - | | - |