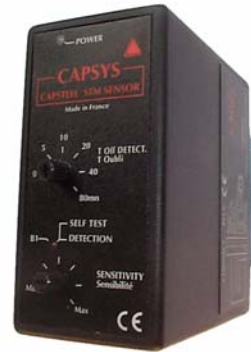


Single Channel Loop detector « STM ».

Connected to an inductive wire loop embedded into the ground, the STM vehicle detector reacts to any presence or variation of a metallic mass over the controlled area. A permanent or calibrated output information is then given.

Its high sensitivity, adjustable by potentiometer, can detect bicycles and other 2 wheels.

Parameters are set on front-face and can be locked by the user.



Applications:

- ✓ Traffic regulation.
- ✓ Traffic lights control.
- ✓ Access control.
- ✓ Parking, barriers and bollards management.
- ✓ Toll gates control.

Properties:

- ✓ Self checking and loop self tuning.
- ✓ 2 wheels detection.
- ✓ Reliable: high technology microprocessor.
- ✓ Clear visual diagnostics by LED .
- ✓ Easy installation and adjustments.

Main features:

• Technology

The STM detector is based on the magnetic induction principle. An inductive loop (WAB) buried into the ground is linked to a detector (STM) which gives the information to the control system.

• Integrated self diagnostics

When switched on, a self diagnostics of the all installation is operated. Then a permanent control takes place. Clear messages (7 possible defaults messages) can be displayed by LED indicator : frequency, state loop circuit, turns, instability ...so that the installation is perfectly operated.

• Self tuning

Integrated functions to avoid bad operating. Easy and reliable set up without any tuning.

• Double galvanic insulation

High immunity of the loop and power supply cable against earth leakages.

• High and constant sensitivity

2 wheels detection possible. Constant sensitivity whatever loop quality. Easy adjustments by potentiometers.

• Drift compensation

Self calibrating calculation brings reliable controls and allows a 40°C/hour drift.

• Easy set up

DIN-rail socket and removable rear mount 11-pin connector.

Technical characteristics:

• Multiple time delays

Easy adjustment by potentiometer.

• Vehicle presence time

Depending on the application, limited presence time (reset) can be preset or adjustable (0 to 80mn) by potentiometer. Permanent detection (without reset) is also available.

• Technical alarm

Additional relay to give an eventual default information to the controller.

• Active back-up > 24 h

In case of power supply failure, no information will be lost (Ni Cd battery)

• Detection accuracy

The STM detector allows a precise vehicle detection and localisation with a short and constant response time (45 ms), whatever the loop quality used.

• Compatibility

Detectors compatible with existing loop installations and all controllers.

• Possible locking of parameters



Technology	Magnetic detection by inductive loop.
Sensitivity dL/L	Constant on all the inductance range
Sensitivity dynamic	Factor 100, adjustable by potentiometer from 0.004% to 0.4% - 0.5%
Loop inductance	Min = 10 µH Max = 1500 µH
Mode	Omni directional
Output and Commuted power	Relay. NO/NC relay = 5A / 250 Vac positive security. Mini 10mA/ 10 VDC
Reaction time	Constant on all the inductance range, independent from frequency : 45 ms Typ.
Power supply	230, 127, 48, 24 Vac / 48 to 62 Hz / 12-24 Vdc / 12 to 24 Vacdc
Power tolerance	AC = ± 15% / DC = -10% +20%
Power requirement	< 1,5VA
Power cut operation	0,5 sec. typically
Temperature range	Stock : -50 to +85°C Use : -30° to +70°C.
Housing/dimensions/Weight	IP 40 / with socket 80 X 40 X 102 mm / ~220 g.
Connection	DIN-rail socket , removable rear mount 11-pin connector
Adjustments	Switch and potentiometers / possible locking by user
Display	Output relay state and diagnostics message by LED.
Norm	Conform to EC norms. Loop and power supply inputs protected against lightning.

Technical notice under request : ST62001A

Options :

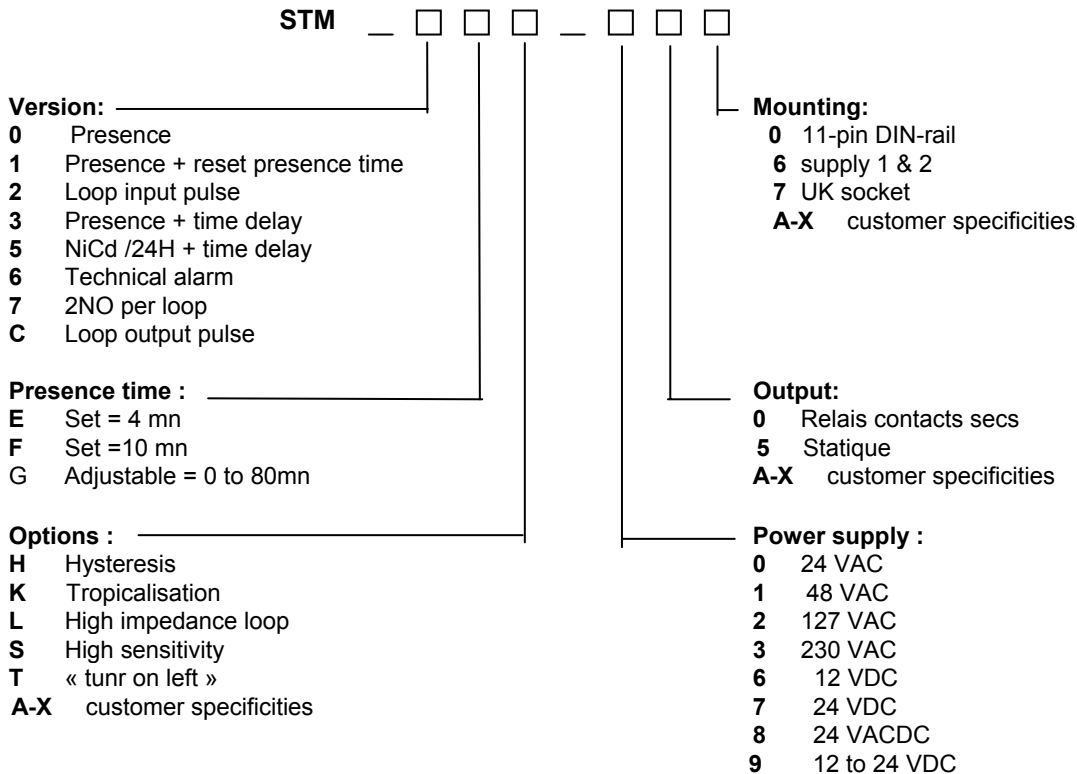
- Specific socket cable.
- Delivery without socket.

Glossary:

- NO = normally open ; NC = normally closed
- NO/NC functionality: power supplied when product is out of detection.
- Positive security: closed relay when out of detection.

Accessories:

- Ref.: WAB-0 -1XX Prewired loop, with 10m cable link, perimeter 6 - 9 -12 – 16 m
- Ref.: WAB-0 -0XX Precabled connector



Preferential references:

- STM-1G-300:** Single channel Detector, output NO+NC positive security, Ltd. presence time 0-80 mn, power supply 230VAC.
- STM-6E-300:** Single channel Detector, output NO+ technical alarm NO positive security, Ltd. presence time 4 mn set, power supply 230VAC.
- STM-7G-300:** Single channel Detector, 2 output NO+NO positive security, Ltd. presence time 0-80 mn, power supply 230VAC.
- STM-5.-.000:** Single channel Detector with battery back-up, output NO+NC positive security, ..., power supply 24VAC.