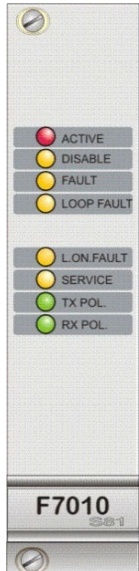


## S81-F7010

### Addressable Device Control Card System Sensor Protocol

Smoke, temperature, combined detectors, push buttons, command modules, and managing modules are available with this protocol.



#### Main Characteristics

- Non redundant (note 1)
- Can be hot-swapped (note 2)
- 99 addresses for sensors and 99 addresses for modules
- Loop connection (farthest point at 1500 meters)
- Detector sensitivity selectable on 5 or 9 levels
- Able to control devices certified according to EN 54-7 e EN 54-9 (CPD).
- Smoke, flame, temperature sensors.
- Combined detectors (smoke/temperature)
- Multi element combined detectors (smoke/temperature/CO/flame)
  - Short-circuit isolators
  - Addressable horns
  - Addressable push buttons
  - Analog interface modules 4-20 mA
  - Sensors
- Periodical functionality self-testing of card and all connected devices
- SMD technology multilayer circuit
- Front plug-in on 19" rack, with locking screws

#### LED Indication on Card

LED	Status	Indication
ACTIVE	⊗	One or more inputs in alarm or active condition
DISABLED	⊗	One input or output disabled
FAULT	∅	Fault condition
LOOP FAULT	∅	Loop short circuit or opening
LOG ON FAULT	∅	Discrepancy between read and expected devices
SERVICE	∅	Optical smoke detector(s) dirty
TX POL.	∅	Data transmission to devices on loop
RX POL.	∅	Data receipt from devices on loop
LED status legend: ⊗= on ; ∅= blinking		

#### Operation

Through two connection and feeder cables, the card communicates with all devices connected on the loop, periodically polling them or receiving calls (interrupt) from the devices that have detected a status variation.

Alarming occurs after the information has been processed, through specific algorithms for the devices; e.g. smoke detectors can provide dynamic alarm thresholds that adjust themselves to compensate for optic sensing element contamination.

#### Parameter Configuration Via Software

Status	Operations
Operating mode:	NA or NC
Channel logic status (note 3)	Latching/Non-latching
Smoke detectors sensibility	5 or 9 settable sensitivity levels
Thresholds	Input in pre-alarm/alarm
Signaling mode	Fire, Supervisory, Gas, Anomaly, Hide, buzzer only
Output activation mode	Steady energized, steady de-energized, periodical, pulsing
Period (pulsing and periodic mode only)	Output settable between 1 to 15 seconds

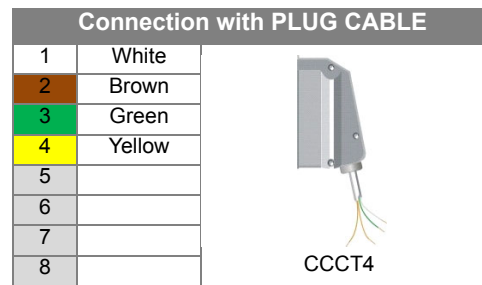
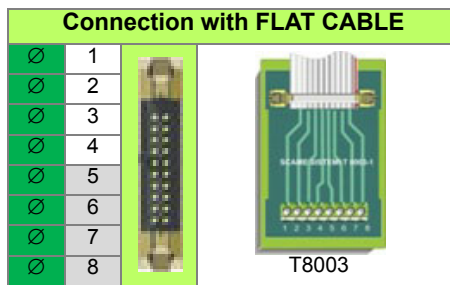
## Connection Via Termination Module

Connection between the card and the field is basically obtained by interposition of a terminal block module, which is mounted on a DIN rail inside the panel and is connected to the card rack by means of a flat cable with two quick connectors. The electronics-type terminals are suitable for cables having a section area of up to 4 mm<sup>2</sup>.

## Connection Via Plug Cable

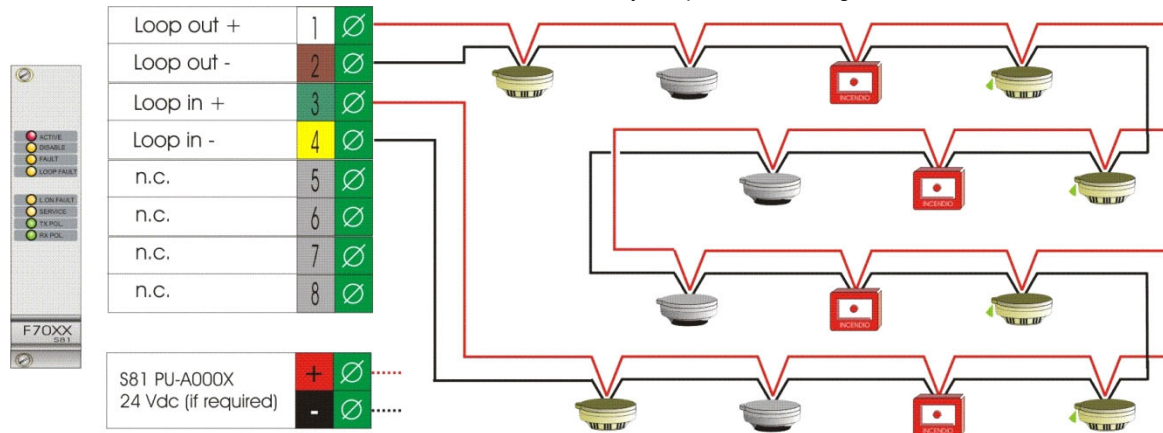
Connection between the card and the field is carried out by means of a special cable, provided with a plug-in connector at one of its ends. Cable conductors are wired directly onto a marshaling terminal block, while the connector is plugged into the back of the rack.

Function	
Loop out +	+
Loop out -	-
Loop in +	+
Loop in -	-
--	
--	
--	
--	



## Connection Example

The connection between the card and devices takes place through two wires (positive and negative line) which return to the tab forming a ring. This connection is allowed if the devices do not exceed the maximum current allowed for the loop. In case the device requires a separate power supply, this will consist of a further connection of two conductors to carry the positive and negative of the 24 Vdc.



## Redundancy (Note 1)

Card redundancy is not possible, due to serial communication protocol.

## Hot-Swap (Note 2)

The card can be removed and replaced without switching off the panel.

## Latching Mode (Note 3)

An alarm status persists until reset.

## Compatibility with protocol System Sensor

This card is compatible with the protocol System Sensor.

For further information please visit the site of addressable device's manufacturer.



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.

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