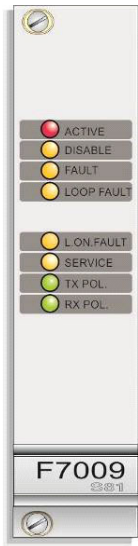


## S81-F7009

### Analog Addressable Device Control Card – Apollo Protocol

Control card for addressable devices that require APOLLO DISCOVERY and XP95 protocols.

With these protocols a wide range of fire detectors, push buttons, optic-acoustic signaling and input/command modules are available.



#### Main Characteristics

- Non redundant (note 1)
- Can be hot-swapped (note 2)
- 127 multichannel addresses
- Loop connection (farthest point at 1500 meters)
- Detector sensitivity selectable during the configuration of the panel
- Sensors certified to EN54 and for marine applications
  - Smoke detectors (photoelectric and ionization)
  - Combine detectors (smoke/temperature)
  - Temperature detectors
  - Short-circuit isolators
  - Addressable sounders
  - Addressable push buttons
  - Wide range of addressable modules with several inputs/outputs
- Sensors and wireless interface units XPander
- 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	Settable depending on the type of sensor
Thresholds	Settable depending on the type of sensor
Signaling mode on alarm outputs	Normal / Silent/ 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
Horn tone on the loop	Settable depending on the type of signaling
Horn volume on the loop	Settable depending on the type of horn

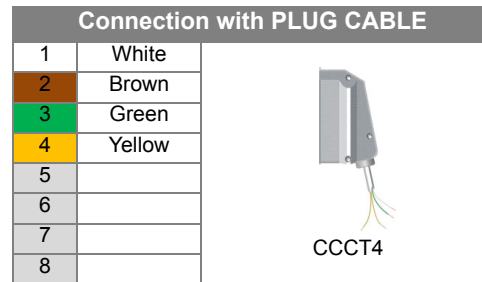
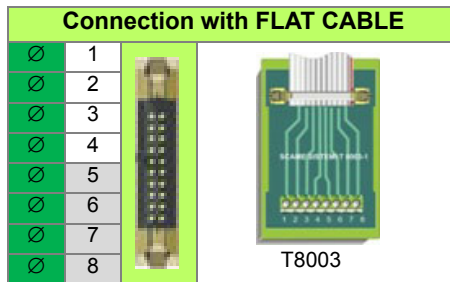
## Connection Via Termination Module

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

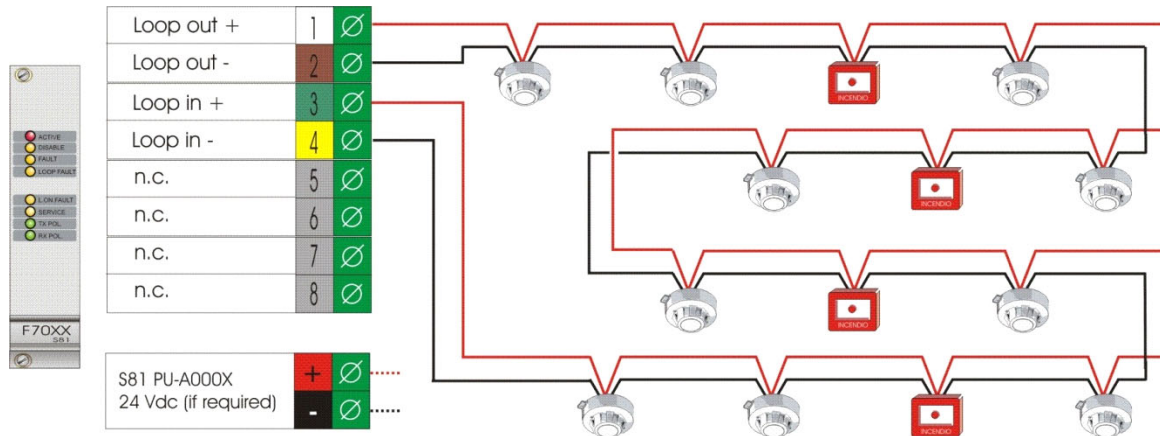
Connection between the card and the field is carried out by means of a special cable, provided with a plug-in connector at one of its ends. Cable conductors are wired directly onto a marshaling terminal block, while the connector is plugged into the back of the rack.

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 of Loop Communication Protocol.

This card is compatible with protocols APOLLO DISCOVERY and XP95.

For further information please visit the site of device's manufacturer: <http://www.apollo-fire.co.uk>



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.

## Honeywell International Inc.

Industrial Fire Protection

12 Clintonville Road

Northford, CT 06472-1610

+1 203-484-7161

fax: +1 203-484-7118

[www.honeywell.com](http://www.honeywell.com)

Honeywell Industrial Training Center

9401 Bay Area Boulevard #400

Pasadena, TX 77507

+1 713-577-1510

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