Honeywell | Industrial Fire

S81-F7012-1-UL

System Sensor Loop Control Card, UL-Listed

General

The S81-F7012 card controls one SLC loop with System Sensor devices, such as smoke detectors, heat detectors, multi-criteria detectors, control modules, monitor modules, and pull stations. Each loop operates in the CLIP polling protocol and is capable of supporting 99 addressable modules and 99 addressable detectors (any combination of modules and detectors) for a total of 198 points per loop.

LED Indicators on Card

LED	Status	Indication				
ACTIVE	8	One or more inputs in alarm or active condition				
DISABLED	8	One input or output disabled				
FAULT	Ø	Fault condition				
LOOP FAULT	Ø	Loop short circuit or opening				
LOG ON FAULT	Ø	Discrepancy between read and expected devices				
SERVICE	Ø	Optical smoke detector(s) dirty				
TX POL.	Ø	Data transmission to devices on loop				
RX POL.	Ø	Data receipt from devices on loop				
LED status legend:		\otimes = on ; \emptyset = 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.

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.



FEATURES

- Non redundant due to serial communication protocol
- Can be hot-swapped: removed and replaced without powering off the panel
- 99 addresses for detectors and 99
- addresses for modules operating in CLIP protocol
- Loop connection (farthest point at 1500 meters)
- Selectable detector sensitivity
- Controls UL 864-certified devices such as:
 - Multi-criteria detectors (smoke/ heat/CO)
 - Short-circuit isolators
 - Addressable smoke detectors
- Addressable heat detectors
- Addressable monitor modules
- Addressable control modules
- Periodic functionality self-test of card and all connected devices
- SMD technology multilayer circuit
- Front plug-in on 19" rack, with locking screws

Function			Connection with PLUG CABLE			
Loop out +	+		1	White		
Loop out -	-		2	Brown		
Loop in +	+		3	Green		
Loop in -	-		4	Yellow		
			5		T	
			6			
			7		CCT4	
			8		CC14	

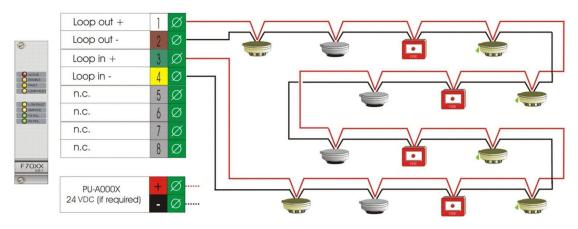
Connection Example

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.

System Sensor® is a registered trademark of Honeywell Inc.

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.



Compatible Devices

- 2251B Photoelectric Smoke Detector
- 2251BR Photoelectric Smoke Detector for use with DNR(W) Duct Detector
- **5251B** Fixed Temperature Thermal Detector
- 5251H High Temperature Thermal Detector
- 5251RB Rate-of-rise Thermal Detector
- 2251TB Photoelectric Smoke Detector with Thermal
- **2251TMB** Acclimate Multi-Criteria Smoke Detector
- 2251-COPTIR Advanced Multi-Criteria Fire Detector
- HON-12LX Pull station
- M502M Zone Interface Module
- For more information

www.industrialfire.honeywell.com

- M500M Monitor Module
- M501M Mini Monitor Module
- M500DM Dual Input Monitor Module
- M500R Relay Module
- M500S Control Module
- SC-6 Six Supervised Control Module
- CR-6 Six Relay Control Module
- CZ-6 Six Conventional Zone Interface Module
- IM-10 Ten Input Monitor Module
- ISO-6 Six Isolator Module
- M500X Isolator Module
- B200SR Sounder Base
- M500R Relay Module

Honeywell

12 Clintonville Road Northford, CT 06472-1610 203.484.7161 www.honeywell.com

