

## Features

- ✧ 1 digital loop interface.
- ✧ Supporting CLASS A.

## Description

- ✧ Refer to GST-IFP4M Fire Alarm Control Panel Installation (Document # 30310301) and Operation Manual (Document # 30310331)
- ✧ LC-401 Single Loop Card provides digital loop interface for GST-IFP4M Control Panel.
- ✧ Max. 242 addressable loop devices can be connected.
- ✧ The following should be set after power on. Refer to GST-IFP4M Fire Alarm Control Panel Installation and Operation Manual for details.
  - 1) Set the quantity of cards connecting to the control panel.
  - 2) Configure device information of every loop.
- ✧ LEDs
  - 1) LC-401 card has two LEDs. Red HL1 is for the state of Loop 1. Red HL2 is reserved.
  - 2) Flashing HL1 means normal operation.
  - 3) HL1 turns off if short circuit occurs.
- ✧ One GST-IFP4M Control Panel can connect 3 LC-401 cards at the most. Its installation position is shown in Fig. 2.

## Connection & Wiring

SLC is loop bus. Each SLC includes four wires: O+ (bus output positive) , O- (bus output negative) , I+ (bus input positive) , and I- (bus input negative) . The wire from O+ is connected back to I+ and the wire from O- back to I-. SLC has two connections of CLASS A.

When connecting with DC-M9503 Loop Isolator, Each SLC can connect up to 128 Isolators. 50 detectors/MCPs/modules can be protected between two isolators. Connection is shown below fig 1.

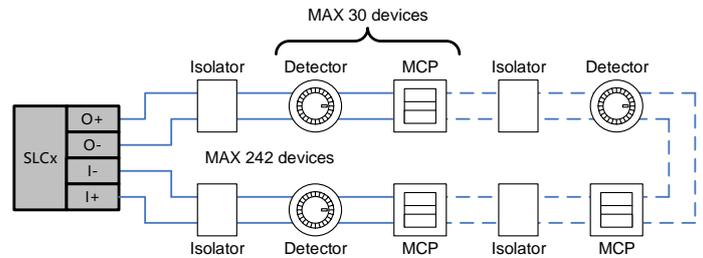


Fig. 1

## Installation

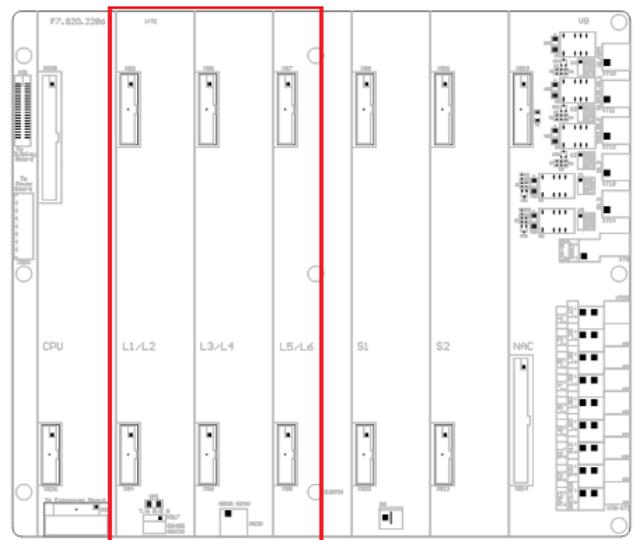


Fig. 2

## Application

LC-401 Single Loop Card is inserted into mother board slots of the control panel as shown in Fig.2. Connecting with loop devices is shown in Fig. 1.

## Specification

Interface	1 digital loop interface
Device Capacity	Max. 242 addressable devices
Transmission Medium	Max. Line Impedance: 18 Ohms each wire
Output Voltage	Min: 18VDC Nominal: 24VDC Max: 28VDC
Current	Standby Current: 0.13A Max Alarm Current : 0.35A
Ambient Temperature	0-49°C/32-120° F
Relative Humidity	≤93%, non condensing

## Trouble shooting

Problems	Solutions
Open circuit	<ol style="list-style-type: none"> <li>1. Check if the connection is correct according to Fig. 1.</li> <li>2. Check if the circuit is open or there is short circuit between isolators.</li> </ol>
Short circuit	<ol style="list-style-type: none"> <li>1. Check if there is short circuit between the control panel and detectors.</li> <li>2. Check the whole circuit to confirm if there is short.</li> </ol>

## Typical Configuration of SLCs

The typical configurations of SLCs include Intelligent Photoelectric Smoke Detector, Intelligent Rate of Rise and Fixed Temperature Heat Detector, Digital Manual Call Point,

This Data Sheet is subject to change without notice. Please contact GST for more information or questions.

**Gulf Security Technology Co., Ltd.**

No. 80, Changjiang East Road, QETDZ, Qinhuangdao, Hebei, P. R. China 066004

Tel: +86 (0) 335 8502434 Fax: +86 (0) 335 8502532

[service.gst@fs.utc.com](mailto:service.gst@fs.utc.com) [www.gst.com.cn](http://www.gst.com.cn)

Addressable Input Module, Addressable Output Module and Loop Isolators. Refer to Table 1 for maximum length of wires in different configurations.

Configuration	1	2	3	4
No. of smoke detectors	60	80	100	120
No. of heat detectors	8	10	10	15
No. of MCPs	8	10	10	15
No. of input modules	4	4	4	10
No. of output modules	4	4	4	10
No. of loop isolators	2	3	4	5
Max. length with 14AWG	4000m	3300m	2600m	2000m
Max. length with 15AWG	3500m	2700m	2200m	1700m
Max. length with 16AWG	3000m	2300m	1900m	1400m
Max. length with 17AWG	2000m	1500m	1200m	900m

Table 1

## Limited Warranty

**GST** warrants that the product will be free from defects in design, materials and workmanship during the warranty period. This warranty shall not apply to any product that is found to have been improperly installed or used in any way not in accordance with the instructions supplied with the product. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty. Please contact your local distributor for products not covered by this warranty.