

# DI-9319E **Digital Zone Monitor Unit**

## **Features**

- ♦ Cable checking for inputs and outputs.
- ♦ Normally-open (NO) or normally-close (NC) output automatically follows Input port to change state.
- ♦ Electronically addressing. Addresses can be modified in field.
- ♦ DIN-Rail mounted or Wall mounted.
- ♦ Standard: EN 54-18:2005

### Description

DI-9319E Digital Zone Monitor Unit (the Unit) is designed to connect with conventional detectors, occupying one address. When any device in the loop reports alarm signal, the Unit will transmit the signal to the FACP which generates fire alarm and displays the address of the Unit.

## Connection and Cabling

Fig. 1 shows terminals of the Unit.

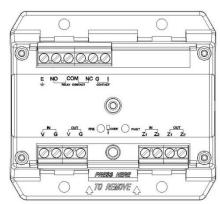


Fig. 1

- (Z1, Z2) IN & OUT: Connect with the loop of FACP, polarity-insensitive.
- (V, G) IN & OUT: Connect with 24VDC power, V connects with a positive terminal and G with a negative terminal.
- I, G: Connect with conventional detectors.

E: Ground cable. This terminal shall not be connected when the 24V power circuit provides cable checking. Otherwise, it shall be connected to ground.

COM, NO, NC: Dry Output terminals. COM and NO are normally open contacts, COM and NC are normally closed contacts ( note: there is  $20k\Omega$  between COM and NO).

CODE: Connect with the programmer.

Recommended Wiring: 1.0mm<sup>2</sup> or above fire cable for all terminals. Subject to local codes.

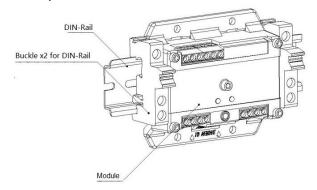




#### Installation

Warning: **Before** installing the Unit, disconnect power from the loop and verify that the guide rail is securely installed.

- Before installation, make sure the enclosure is in good condition and markings are complete.
- 2) The module can be mounted on a 35mm DIN-Rail as shown on Fig. 2.
- The module can also be wall mounted by 4 mounting screws as shown in Fig. 3. Mouting space is 67×40.5mm.



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Fig. 2

Fig. 3

#### Application

The output loop can connect up to 30 conventional devices. Smoke, heat and combination detectors, such as DC-9101E Detector, DC-9102E Detector, DC-9103E

30310468 **Issue 1.05**  Detector, C-9101 Detector, C-9102 Detector, C-9103 Detector and C-9104 Detector can be used together.

The parameters of the Unit can be programmable by a programmer in field.

#### **Programming Parameters:**

In standby state of the programmer, pressing *Fn* and then number 3, "—" (data waiting for programming) will be popped up on the screen. Writing a parameter and then pressing "Program", a "P" will show on the screen meaning the parameter is programmed.

Press Fn and then number 3, output checking methods can be set.

1	No checking
others(Default)	Checking

The relationship between the input port resistance and the product state is shown in the following table:

I/G port Resistance	Input state
0 - 100Ω	Short fault
110 - 1.4kΩ	Alarm
1.5 - 10kΩ	Normal
> 11 kΩ	Open fault

The relationship between the output port voltage and the product state is shown in the following table:

Output port voltage	Output state
< 8 V	Fault
> 9 V	Normal

If the output end connects with end-of-line resistor, the system connection is shown in Fig. 4.

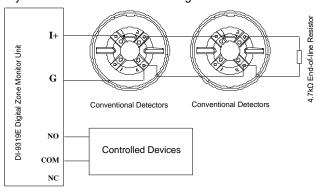
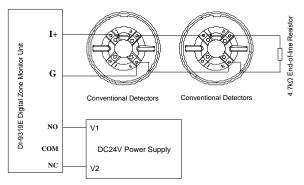


Fig. 4

If the NO and COM terminals do not connect the controlled device, the DC24V power supply on the controller is needed, the system connection is shown in Fig. 5.



#### **Accessories and Tools**

Model	Name	Remark
P-9910B	Hand Held	Order
	Programmer	separately
RT-0.25W-4.7k	Resistor	Provided
Ω±5%-25mm		

#### **Specification**

Operating Voltage	Loop: 24VDC (16VDC-28VDC) Power: 24VDC(20VDC-28VDC)	
Standby Current	Loop≤ 0.38mA	
	mA Power≤ 10mA	
	Loop ≤ 0.39mA	
Action Current	Power≤ 60mA	
Output Capacity	2A@30VDC	
Relay Output	NO or NC	
Input Capacity	Up to 30 conventional detectors	
Programming	Electronically addressed. Code	
Method	range is within 1 - 242.	
Indicators	Alarm LED: Red, illuminates in fire condition, quiet when 24V power is off and flashes in other states.  Fault LED: Yellow, it turns 0.5s on, 0.5s off when input fault occur, 0.2s on and 0.2s off when output faults occur, 0.1s on and 0.9s off when ground fault occurs. It lights steadily when loop faults occur and it turns off in other states.	
Ingress Protection Rating	IP30	
Operating Temperature	-10°C - +55°C	
Relative Humidity	≤ 95%, non-condensing	
Compatible DIN-Rail	35mm DIN-Rails	
Material and Color of Enclosure	ABS, white (RAL9016)	
Dimension (LxWxH)	85.3mm×78mm×33mm	
Weight	About 74.1g	

### **Limited Warranty**

**GST** warrants that the product will be free of charge for repairing or replacing 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.

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