

# **Input/Output Modules Data Sheet**



The wide range of input and output modules available from NOTIFIER delivers exceptional flexibility to a NOTIFIER fire detection and alarm system. Using these modules enables integration with a host of other building management and emergency systems, including access control systems, lifts, fire shutters and emergency lighting.

# **Features**

- Analogue addressable communications
- Built-in type identification automatically identifies these devices to the control panel (not M700X)
- Stable communication technique with high noise immunity
- Rotary DECADE 01 to 99 address switches (not M700X)
- Common mounting options including Surface Mount, Panel Mount and DIN Rail Mount.
- Tri-colour LED's
- Powered directly by 2-wire loop. No additional power required
- Plug-in terminal connections for ease of field wiring
- Approved to CEA GEI 1-082 AND CEA GEI 1-084
- CPD approval to EN54-17 and EN54-18, LPCB and VdS

# Installation

The M700 series modules can be mounted either surface, panel mounted in other equipment housings or DIN rail mounted in other equipment housings.

Surface mounting is achieved by using the M200E-SMB surface mount box which accepts a single module. This box has a frosted plastic lid with viewing windows for the product identification label, LED's and address switches.

This document is not intended to be used for installation purposes. Every care has been taken in the preparation of this document but no liability can be accepted for the use of the information therein. Design features may be changed or amended without prior notice For more information, contact:

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ISO9001 Design, Manufacture and Supply to Quality Manage ment Systems Certified to ISO9001:1994



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# M710 Single input module

The M700 series modules are designed for use with any NOTIFIER protocol fire alarm control panel and include selectable loop isolation in every device.

The M710 module monitors a single input device circuit of normally open dry contact alarm activation devices.

These modules use one of 99 available module addresses on a loop and respond to regular polls from the control panel reporting its type and the status (open/normal/short) of its supervised device circuit.



# **Specifications**

M710 Single input module

# **Mechanical Specification**

· Dimensions:

Height: 90 mm
Width: 92 mm
Depth: 23 mm

• Weight: 90g

# **Electrical Specification**

Current Consumption
 Without communication

ommunication 310 µA @ 24 VDC;

Communication every 5 sec. with LED blink enabled.

510 μA @ 24 VDC

Maximum Alarm Current:

5 mA @ 24 VDC (per LED with LED enabled)

Operating Voltage:
 15 to 30 VDC peak

# **Environmental Specifications**

• Operating temperature -20°C to +60°C

• Relative humidity: 0% to 95%, non-condensing

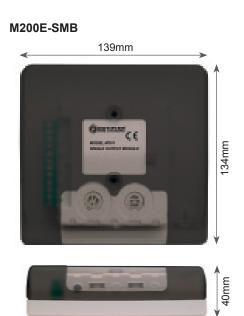
# 92mm WOOD MYP WOOD WINN WOOD W



M200E-DIN



M200E-PMB



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# Non- Addressable Zone Monitor Module M710-CZR

The M710-CZR non-addressable zone monitor module allows a zone of non-addressable detectors to communicate with a Notifier analogue addressable system. As a result existing nonaddressable loops can be integrated into a Notifier addressable system

The module monitors a zone of two-wire non-addressable smoke detectors. Each M710-CZR uses one of 99 available module addresses on a loop. The non-addressable zone can be powered from the analogue communication line or from an external power supply. Where the non-addressable zone is powered from an external power supply, the communication line is fully isolated from the nonaddressable zone and from the power supply.

This M710-CZR non-addressable Zone Monitor module fits into M200E-SMB, M200E-DIN or M200E-PMB. These may then be installed in a 19" Rack Assembly using Notifier 19" Rack mounting adapters. Mounting hardware and installation instructions are provided with each module.



# **Specifications**

Non- Addressable Zone Monitor Module M710-CZR

Mechanical	Specification
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· Dimensions:

 Height:
 93 mm

 Width:
 89 mm

 Depth:
 27.5 mm

· Weight:

Flush 110 g Surface 130 g

### **Electrical Specification**

Operating Voltage: 15 V to 30VDC maximum

# **Environmental Specifications**

• Operating temperature -20°C to +60°C

Relative humidity: 5% to 95%, non-condensing

# M710 CZR



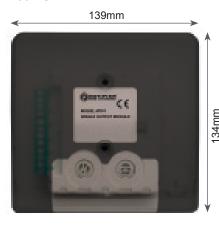
# M200E-DIN



### M200E-PMB



### M200E-SMB





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# M701 Single output module

The M700 series modules are designed for use with any NOTIFIER protocol fire alarm control panel and include selectable loop isolation in every device.

The M701 control module provides a monitored single output circuit for use with polarised loads (sounder circuit) which requires a suitable power source (7Vdc - 30Vdc) for the connected load. Alternatively the same device may be placed in to an unsupervised mode which can then be used to control any switched load up to 2A @ 30Vdc.

In addition the M701-240 and the M701-240-DIN provide two (1 x N.O. 1 x N.C.) 250Vac (nominal 230Vac), 5Amp contact outputs. The M701-240 is provided complete with a surface mounting back box and the M701-240-DIN is supplied in a DIN rail mounting package.

These modules use one of 99 available module addresses on a loop and respond to regular polls from the control panel reporting its type and the status (open/normal/short) of its supervised device circuit.



M701 single output module

# **Mechanical Specification**

· Dimensions:

 Height:
 90 mm

 Width:
 92 mm

 Depth:
 23 mm

· Weight:

M701 102g M701-240 200g M701-240-DIN 195g

# **Electrical Specification**

· Current Consumption (Without communication)

M701 310 μA @ 24 VDC M701-240 & M701-240-DIN 275 μA @ 24 VDC

• Current Consumption (Communication every 5 sec. with LED blink enabled)

M701 510 μA @ 24 VDC M701-240 & M701-240-DIN 445 μA @ 24 VDC

Maximum Alarm Current: 5 mA @ 24 VDC

(per LED with LED enabled)

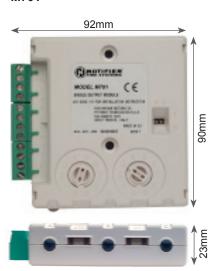
Operating Voltage:
 15 to 30 VDC peak

# **Environmental Specifications**

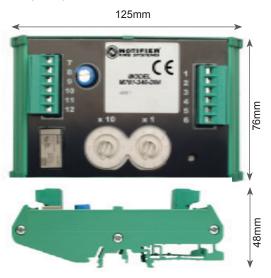
• Operating temperature -20°C to +60°C

Relative humidity: 0% to 95%, non-condensing

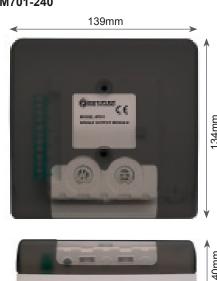
# M701



### M701-240-DIN



### M701-240



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# M720 Dual Input Module

The M700 series modules are designed for use with any NOTIFIER protocol fire alarm control panel and include selectable loop isolation in every device.

The M720 dual monitor module provides two supervised input device circuits of normally open dry contact alarm activation devices.

The M720 module uses two addresses of 99 available module addresses on a loop and responds to regular polls from the control panel reporting its type and the status (open/normal/short) of their supervised device circuits.



# **Specifications**

M720 Dual Input Module

# **Mechanical Specification**

· Dimensions:

90 mm Height: Width: 92 mm Depth: 23 mm 90g · Weight:

# **Electrical Specification**

· Current Consumption Without communication

Communication every 5 sec. with LED blink enabled.

Maximum Alarm Current:

5 mA @ 24 VDC (per LED with LED enabled)

340 µA @ 24 VDC;

600 µA @ 24 VDC

· Operating Voltage: 15 to 30 VDC peak

# **Environmental Specifications**

· Operating temperature -20°C to +60°C

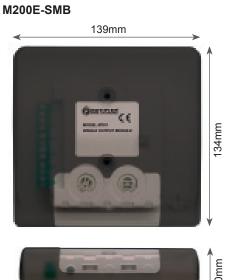
· Relative humidity: 0% to 95%, non-condensing

# 92mm

M200E-DIN



M200E-PMB





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# M721 Dual Input Module with Output

The M700 series modules are designed for use with any NOTIFIER protocol fire alarm control panel and include selectable loop isolation in every device.

The M721 dual input, single relay output module, as well as providing two supervised inputs also provides a single change over relay output rated at 2A @30Vdc.

The M721 uses three addresses of 99 available module addresses on a loop and responds to regular polls from the control panel reporting its type and the status (open/normal/short) of their supervised device circuits.



# **Specifications**

M721 Dual Input Module with Output

# **Mechanical Specification**

· Dimensions:

 Height:
 90 mm

 Width:
 92 mm

 Depth:
 23 mm

 • Weight:
 102g

# **Electrical Specification**

Current Consumption
 Without communication

340 μA @ 24 VDC;

Communication every 5 sec. with LED blink enabled.

660 μA @ 24 VDC

Maximum Alarm Current:

5 mA @ 24 VDC (per LED with LED enabled)

Operating Voltage:
 15 to 30 VDC peak

# **Environmental Specifications**

• Operating temperature -20°C to +60°C

Relative humidity:
 0% to 95%, non-condensing



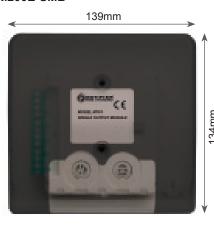




M200E-PMB



M200E-SMB





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# 10 Way Output Module CMX-10RM

Each input and output are individually addressed and controlled by the control equipment and provide a cost effective, compact solution for installations requiring multiple switching and / or monitoring at a single location.

Inputs may be configured to monitor for open circuit, short circuit and active (fire) conditions. Each output consists of a form C (change over) relay contact providing both normally open and normally closed contacts rated 2A at 30Vdc.

Each module card utilises up to 10 consecutive addresses with the base address being set by DIP switch although any of the 10 addresses may be individually disabled allowing the use of this address by other modules on that loop.



# **Specifications**

10 Way Output Module CMX-10RM

### **Mechanical Specification**

· Dimensions:

 Height:
 233 mm

 Width:
 70 mm

 Depth:
 13 mm

The modules are supplied as a P.C.B. allowing installation in to other equipment housings such as control cabinets.  $5 \times 3.5$ mm mounting holes provide suitable secure mounting for the P.C.B's as indicated overleaf. Each module occupies a single Notifier Loop Module address with the first address being set by DIP switch SW2 and subsequent address being base address + n up to a maximium of 10. Individual modules may be disabled via a second DIP switch SW1 such that any module address in the range can be used for other module addresses on the loop.

11 (10 input / output plus 1 loop in & out) two part plug in terminal blocks are provided for ease of field installation. All modules have on board LED's that may be disabled with the output routed to a connector allowing LED's to be mounted off the P.C.B. on the equipment housing for example.

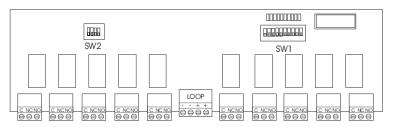
### **Electrical Specification**

- Current Consumption
   1.7mA with communication and LED blink enabled
- · LED Current, 5mA @ 24Vdc (LED on) per module

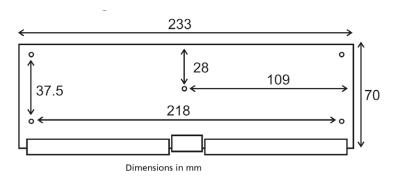
### **Environmental Specifications**

- Operating temperature -10°C to +55°C
- Relative humidity: 10% to 93%, non-condensing

# **Connection Detail**



# **Mounting Detail**



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# 10 Way Input Module MMX-10M

Each input and output are individually addressed and controlled by the control equipment and provide a cost effective, compact solution for installations requiring multiple switching and / or monitoring at a single location.

Inputs may be configured to monitor for open circuit, short circuit and active (fire) conditions. Each output consists of a form C (change over) relay contact providing both normally open and normally closed contacts rated 2A at 30Vdc.

Each module card utilises up to 10 consecutive addresses with the base address being set by DIP switch although any of the 10 addresses may be individually disabled allowing the use of this address by other modules on that loop.



# **Specifications**

10 Way Input Module MMX-10M

### **Mechanical Specification**

· Dimensions:

 Height:
 233 mm

 Width:
 70 mm

 Depth:
 13 mm

The modules are supplied as a P.C.B. allowing installation in to other equipment housings such as control cabinets. 5 x 3.5mm mounting holes provide suitable secure mounting for the P.C.B's as indicated overleaf. Each module occupies a single Notifier Loop Module address with the first address being set by DIP switch SW2 and subsequent address being base address + n up to a maximium of 10. Individual modules may be disabled via a second DIP switch SW1 such that any module address in the range can be used for other module addresses on the loop.

11 (10 input / output plus 1 loop in & out) two part plug in terminal blocks are provided for ease of field installation. All modules have on board LED's that may be disabled with the output routed to a connector allowing LED's to be mounted off the P.C.B. on the equipment housing for example.

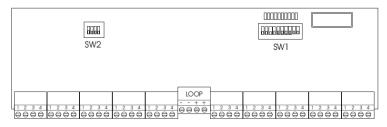
### **Electrical Specification**

- Current Consumption
   1.7mA with communication and LED blink enabled
- · LED Current, 5mA @ 24Vdc (LED on) per module

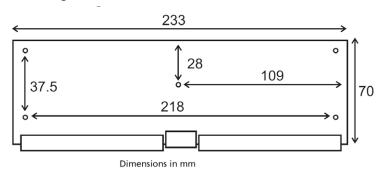
### **Environmental Specifications**

- Operating temperature -10°C to +55°C
- Relative humidity: 10% to 93%, non-condensing

# **Connection Detail**



### **Mounting Detail**



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# 5 Way Input and 5 Way Output Module MCX-55

Each input and output are individually addressed and controlled by the control equipment and provide a cost effective, compact solution for installations requiring multiple switching and / or monitoring at a single location.

Inputs may be configured to monitor for open circuit, short circuit and active (fire) conditions. Each output consists of a form C (change over) relay contact providing both normally open and normally closed contacts rated 2A at 30Vdc.

Each module card utilises up to 10 consecutive addresses with the base address being set by DIP switch although any of the 10 addresses may be individually disabled allowing the use of this address by other modules on that loop.



# **Specifications**

M721 Dual Input Module with Output

### **Mechanical Specification**

· Dimensions:

 Height:
 233 mm

 Width:
 70 mm

 Depth:
 13 mm

The modules are supplied as a P.C.B. allowing installation in to other equipment housings such as control cabinets. 5 x 3.5mm mounting holes provide suitable secure mounting for the P.C.B's as indicated overleaf. Each module occupies a single Notifier Loop Module address with the first address being set by DIP switch SW2 and subsequent address being base address + n up to a maximium of 10. Individual modules may be disabled via a second DIP switch SW1 such that any module address in the range can be used for other module addresses on the loop.

11 (10 input / output plus 1 loop in & out) two part plug in terminal blocks are provided for ease of field installation. All modules have on board LED's that may be disabled with the output routed to a connector allowing LED's to be mounted off the P.C.B. on the equipment housing for example.

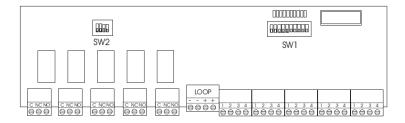
### **Electrical Specification**

- Current Consumption
   1.7mA with communication and LED blink enabled
- · LED Current, 5mA @ 24Vdc (LED on) per module

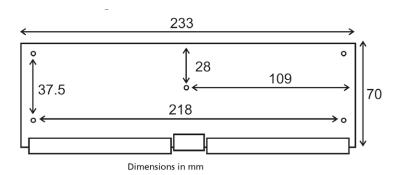
### **Environmental Specifications**

- Operating temperature -10°C to +55°C
- Relative humidity: 10% to 93%, non-condensing

# **Connection Detail**



# **Mounting Detail**



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# **Product Range at a Glance**

		Part Number
2	Single isolation module.	M700X
0.13	Single output module	M701
0.11	Single input unit	M710
0.18	Dual input unit	M720
10,19	Dual input, single output module	M721
	Single 230Vac output unit inc. surface mount box	M701-240
O O .	Single 230Vac output unit inc. DIN rail mounting enclosure	M701-240-DIN
	Surface Mount Box	M200E-SMB
	Surface Mount Box for 6 M7xx series modules	SMB6-V0
1	Panel Mount Bracket	M200E-PMB
3	DIN rail mounting clip	M200E-DIN
**************************************	10 Way Relay Output Module	CMX-10RM
	10 Way Monitor Module	MMX-10M
.0000	5 Way Input & 5 Way Relay Output Module	MCX-55

