

Ribble Enviro
...everything gas detection

Data Sheet

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**The Unipoint, a simple
DIN rail mounted controller**

Unipoint DIN Controller



Typical Applications

- Small and medium integrated systems
- Custom control cabinets and panels
- Unmanned equipment rooms
- Boiler houses
- HVAC systems
- Analyser houses
- Car parks
- Crane cabs
- Laboratories

User Friendly

- Ultra-clear backlit display
- System status codes
- Built-in audiovisual alarms
- Intuitive menu system
- Simple pushbutton operation
- Remote accept, reset and inhibit inputs

Easy to Install

- TS35 ("top hat") DIN rail mounting
- Removable terminal connectors
- Easy access to all terminals
- Additional units clip together

Comprehensive Operation

- 3 wire mV bridge, 2 and 3-wire 4-20mA inputs
- DC operation
- 3 x alarm relays
- 1 x system fault relay
- Field inhibit input (mA versions)

Flexible Operation

- Fully user programmable scale, units and calibration
- Relays configurable as energised, de-energised, latching or non-latching, alarm relay on/off delay
- Compatible with a wide range of gas detectors

The Unipoint is a simple DIN rail mounted controller offering integrators a flexible and low cost solution to incorporate flammable, toxic or Oxygen gas detection into their control systems.

Unipoint can be easily installed into any plastic or metal enclosure for use indoor or outdoors and even in potentially explosive atmospheres. With the addition of one of the Honeywell Analytic's range of flammable, toxic or Oxygen detectors, systems may be configured to monitor gases in a wide range of applications from car parks and boiler houses to analyser shelters or crane cabs in offshore facilities.

Two versions of Unipoint are available; one for mV bridge, catalytic bead type, flammable gas detector and the other for any 2 or 3 wire 4-20mA type gas detector. Each Unipoint is easily installed onto the DIN rail via a special socket (provided) that also interconnects power to adjacent units. With removable terminal connectors, individual Unipoint controllers can be easily changed without disturbing other devices.

By clipping together multiple Unipoints small to medium sized monitoring solutions can be realised. Each unit includes built-in audiovisual alarms, three programmable alarm relays and a fault relay. Gas concentration and system status is displayed on the backlit LCD and each controller is fully user programmable via an intuitive, push button operated menu system. Configuration menus can be password protected to prevent unauthorised access. In addition remote inputs allow accept, reset and inhibit of alarms without the need to open the enclosure that the Unipoint is mounted in.

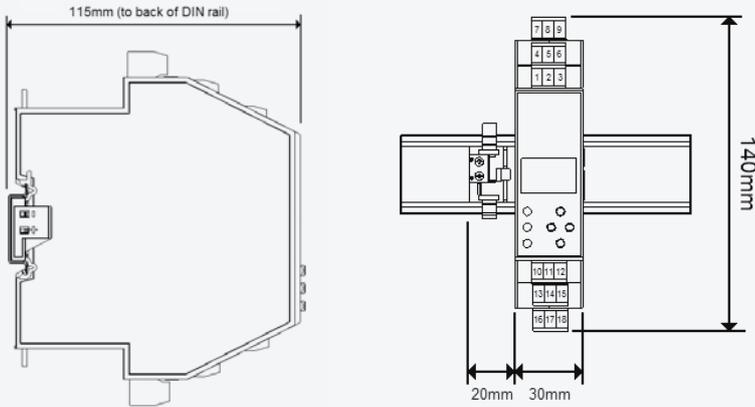
Unipoint's uncomplicated design makes it ideal for applications where a simple method of integrating gas detectors into a 3rd party control system is required or as part of a small standalone gas detection solution. All Honeywell Analytics gas detectors and third party detectors may be used with Unipoint subject to overall power requirements.



Installation Details



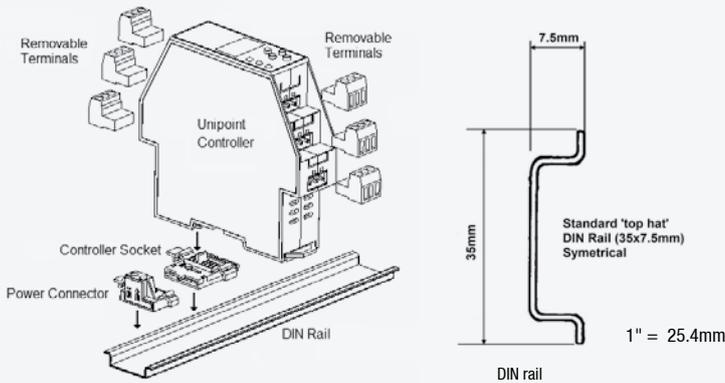
Dimensions



Terminal Detail

1	+	Detector
2	S	
3	-	
4	NO	Fault
5	C	
6	NC	
7	R	Reset
8	I	Inhibit
9	C	Common
10	NO	Alarm 1
11	C	
12	NC	
13	NO	Alarm 2
14	C	
15	NC	
16	NO	Alarm 3
17	C	
18	NC	

Installation



Max number of controllers on one power rail

Detector type	Max number of controllers
3-wire mV	8
2-wire mA	8
3-wire mA	4

wiring of power rail in parallel allows larger systems to be constructed

Electrical

Type of Detector	Output to Detector	Recommended Detector
2-wire 4-20mA	Controller Input (18-32VDC)-1.5VDC*, 30mA (max) Sense resistor 33 Ohms	Signalpoint or Sensepoint Toxic and Oxygen
3-wire 4-20mA source	Controller Input (18-32 VDC)-1.5VDC*, 0.5A (max) Sense resistor 33 Ohms	Sensepoint XCD
3-wire mV bridge	2.4-8.6V, 200mA constant current. Max cable loop resistance 28 Ohms.	Signalpoint or Sensepoint Flammable

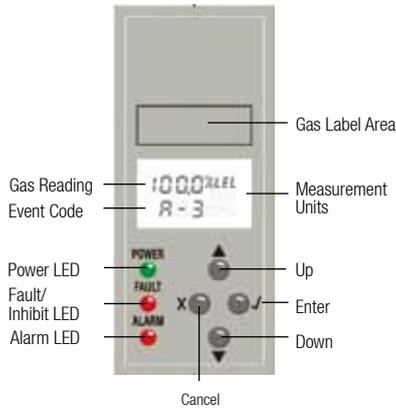
*The detector supply voltage is 1.5Vdc less than the supply to the controller

Controller Power Consumption

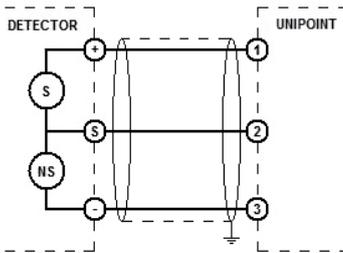
Unipoint Version	Controller Status	Relays		Power
		Fault	Alarm	
mV	Normal operation, no faults, no alarms. Zero cable resistance	Energised	De-energised	2.4W ¹
	Normal operation, no faults, no alarms. Max loop cable resistance (28 ohms)	Energised	De-energised	3.6W ¹
	All alarms, no faults. Max cable resistance (28 ohms)	Energised	Energised	4.8W ¹
mA	Normal operation, no faults, no alarms. Inclusive of 2-wire signal loop current	Energised	De-energised	1.8W ²
	All alarms, no faults. Inclusive of 2-wire signal loop current	Energised	Energised	3.0W ²

¹ includes power to detector ² excludes power to 3 wire mA detector. All controllers with default configuration.

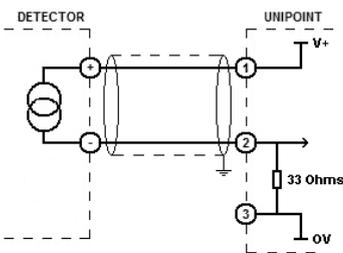
Technical Summary



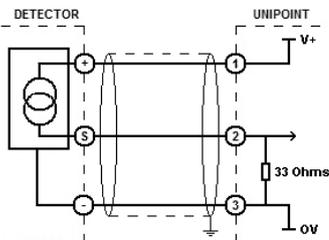
Detector Wiring Schematics



3 wire mV (e.g. Signalpoint and Sensepoint Flammable)



2 wire mA (e.g. Signalpoint and Sensepoint Toxic and Oxygen)



3 wire mA (e.g. Sensepoint XCD all versions)

General Specification

Use	The Unipoint controller provides integrators with a flexible and low cost solution to the many applications requiring flammable, toxic or Oxygen gas detection to be incorporated into their control systems. Unipoint is designed to use industry standard DIN rail allowing it to be easily installed into many different types of plastic or metal, indoor or outdoor, hazardous or non-hazardous area enclosures. It is designed for use with any mV flammable gas detector as well as any 2 or 3 wire 4-20mA gas detector (subject to overall power requirements).			
User Interface				
Operation	Two pushbuttons for normal operation of resetting alarms and initiating self diagnostic test of system. Four buttons for user programmable functions via intuitive menu			
Backlit Display	Units of measure, digital gas reading and event code			
Other Indication	Ultra-bright steady / flashing LEDs subject to condition; alarm (red), power (green), fault (amber). In-built audible alarm 63db at 0.3 meters			
Termination	Easily accessible plug in screw type terminals. Terminals accept maximum wire diameter 1.5mm ² (16 AWG)			
Environmental				
IP Rating	Indoor, IP3x, to BS EN 60529:1992 (controller to be installed in suitable enclosure)			
Weight	225g (7.94oz) - Controller only			
Operating Temp Range	-10°C to +55°C / 14°F to 131°F (Performance approval -10°C to +40°C / 14°F to 104°F)			
Operating Humidity Range	10 to 90% RH (non condensing)			
Operating Pressure Range	90-110kPa			
Storage	-25°C to +60°C / -13°F to +140°F, 20 to 80% RH (non condensing)			
Inputs				
Supply	Nominal 24VDC (18-32VDC). Max power mV = 4.8W (including power to detector), mA= 3.0W (excluding power to 3 wire detector)			
Detector Type	3 wire mV bridge e.g. Sensepoint or Signalpoint flammable gas detectors	2 wire, 4-20mA, loop powered e.g. Sensepoint or Signalpoint toxic or Oxygen gas detectors	3 wire, 4-20mA, source output e.g. Sensepoint XCD flammable, toxic and Oxygen gas detectors	
Detector Supply	2.4-8.6V, 200mA constant current. Maximum loop resistance: 28 Ohms	Input (18-32VDC)-1.5VDC, 30mA max	Input (18-32VDC)-1.5VDC, 0.5A max	
Outputs				
Relays	Alarm 1	Alarm 2	Alarm 3	Fault
Rating	SPCO / 3A, 240VAC / 28VDC (non inductive load)	SPCO / 3A, 240VAC / 28VDC (non inductive load)	SPCO / 3A, 240VAC / 28VDC (non inductive load)	SPCO / 3A, 240VAC / 28VDC (non inductive load)
Default Setting	Non-latching Normally de-energised Energise on alarm Factory setting 10% FSD	Non-latching Normally de-energised Energise on alarm Factory setting 25% FSD	Latching Normally de-energised Energise on alarm Factory setting 50% FSD	Non-latching Normally energised De-energise on fault / power loss
User Configurable Options	Latching / non-latching Energised / de-energised Alarm trip point Rising / falling Alarm on / off delay (0 to 900 seconds)	Latching / non-latching Energised / de-energised Alarm trip point Rising / falling Alarm on / off delay (0 to 900 seconds)	Latching / non-latching Energised / de-energised Alarm trip point Rising / falling Alarm on / off delay (0 to 900 seconds)	Latching / non-latching Energised / de-energised
Approvals				
EMC/RFI	EN50270			
Electrical Safety	EN61010, UL61010b			
Performance	ATEX measuring function EN60079-29-1 SIRA10ATEX8243X			
Other	CE, TÜV			

Ordering Information



Ordering Information

Controllers

Unipoint Controller (mV input version)	2306B2000
Unipoint Controller (mA input version)	2306B1000

Spares

Unipoint Terminal Block Plug (x2)	2306B3010
Unipoint DIN rail socket kit	2306B3020
Unipoint power connector kit	2306B3030

Required controller type reference:

Detector	Gas Type	No. Wires	Controller Required
Signalpoint	Flammable	3	mV
	Toxic	2	mA
Sensepoint	Flammable	3	mV
	Toxic	2	mA
Sensepoint XCD	Flammable	3	mA
	Toxic	3	mA

Standard Supply

Each Unipoint controller is supplied complete with DIN rail socket, power connector, gas type stickers and instruction manual.

Shipping Details

Shipping carton dimensions: H197mm (7.8") x W275mm (10.8") x D36mm (1.4")
Approximate weight: 420g (14.8oz)

