

**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.

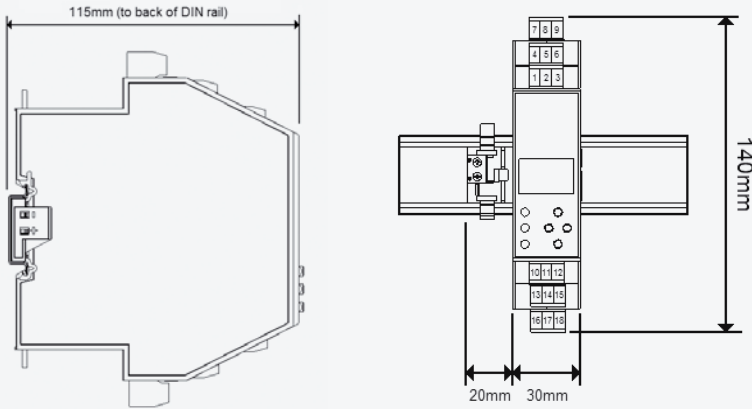
Unipoint's uncomplicated design makes it ideal for applications where a simple method of integrating gas detectors into a 3rd party control system is required or as part of a small standalone gas detection solution. All Honeywell Analytics gas detectors and third party detectors may be used with Unipoint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



# Installation Details



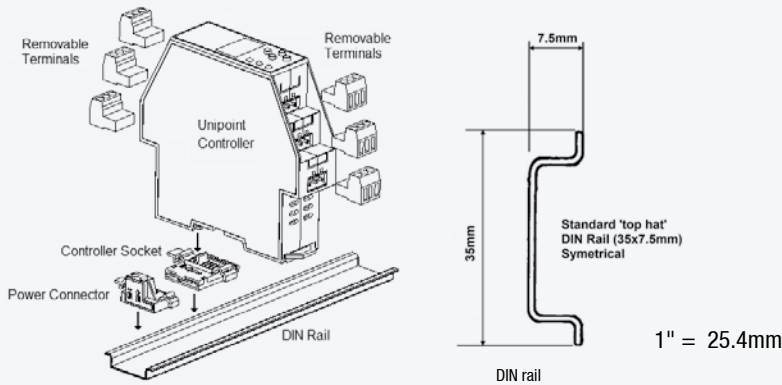
## Dimensions



## Terminal Detail

1	+	Detector
2	S	
3	-	
4	NO	Fault
5	C	
6	NC	Reset
7	R	
8	I	Inhibit
9	C	Common
10	NO	Alarm 1
11	C	
12	NC	Alarm 2
13	NO	
14	C	Alarm 3
15	NC	
16	NO	
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 (18-32Vdc)-1.5Vdc*, 0.5A (max). Sense resistor 33 Ohms.	Sensepoint Plus and Sensepoint Pro
3 wire mV bridge	2.4-8.6V, 200mA constant current. Max cable loop resistance 28 Ohms.	Signalpoint or Sensepoint Flammable

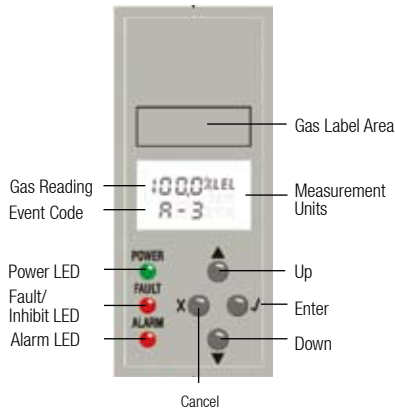
\*The detector supply voltage is 1.5Vdc less than the supply to the controller

## Controller Power Consumption

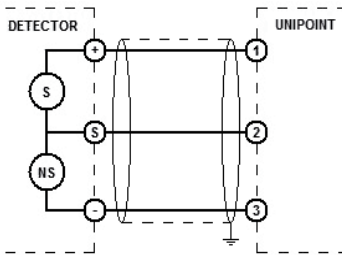
Unipoint Version	Controller Status	Relays		Power
		Fault	Alarm	
mV	Normal operation, no faults, no alarms. Zero cable resistance	Energised	De energised	2.4W <sup>1</sup>
	Normal operation, no faults, no alarms. Max loop cable resistance (28 ohms)	Energised	De energised	3.6W <sup>1</sup>
	All alarms,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

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

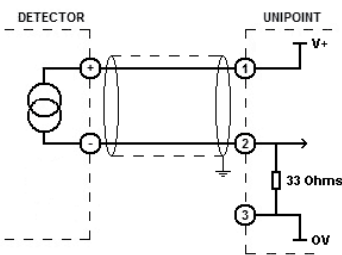
# Technical Summary



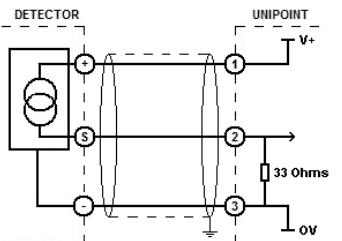
## Detector Wiring Schematics



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 Plus and Pro all versions)

## General Specification

<b>Use</b>	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).			
<b>User Interface</b>				
<b>Operation</b>	Two pushbuttons for normal operation of resetting alarms and initiating self diagnostic test of system. Four buttons for user programmable functions via intuitive menu			
<b>Backlit Display</b>	Units of measure, digital gas reading and event code			
<b>Other Indication</b>	Ultra-bright steady/flashing LEDs subject to condition; alarm (red), power (green), fault (amber). In-built audible alarm 63dB at 0.3 meters			
<b>Termination</b>	Easily accessible plug in screw type terminals. Terminals accept maximum wire diameter 1.5mm <sup>2</sup> (16 AWG)			
<b>Environmental</b>				
<b>IP Rating</b>	Indoor, IP3x, to BS EN 60529:1992 (controller to be installed in suitable enclosure)			
<b>Weight</b>	225g (7.94 oz) - Controller only			
<b>Operating Temp Range</b>	-10°C to +40°C / 14°F to 104°F			
<b>Operating Humidity Range</b>	10 to 90%RH (non condensing)			
<b>Operating Pressure Range</b>	90-110kPa			
<b>Storage</b>	-25°C to +60°C / -13°F to +140°F, 20 to 80%RH (non condensing)			
<b>Inputs</b>				
<b>Supply</b>	Nominal 24Vdc (18-32Vdc). Max power mV = 4.8W (including power to detector), mA= 3.0W (excluding power to 3 wire detector)			
<b>Detector Type</b>	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 Plus and Pro flammable, toxic and Oxygen gas detectors	
<b>Detector Supply</b>	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	
<b>Outputs</b>				
<b>Relays</b>	Alarm 1	Alarm 2	Alarm 3	Fault
<b>Rating</b>	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)
<b>Default Setting</b>	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
<b>User Configurable Options</b>	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
<b>Approvals</b>				
<b>EMC/RFI</b>	EN50270			
<b>Electrical Safety</b>	EN61010, UL61010b			
<b>Performance</b>	ATEX measuring function EN61779 (Independent accreditation expected late 2005)			
<b>Other</b>	CE, TUV			

\* Functionality only implemented in units supplied with software version 5V0. Available late 2005.

# Ordering information



## Ordering Information

### Controllers

<b>Unipoint Controller (mV input version)</b>	2306B2000
<b>Unipoint Controller (mA input version)</b>	2306B1000

### Spares

<b>Unipoint Terminal Block Plug (x2)</b>	2306B3010
<b>Unipoint DIN rail socket kit</b>	2306B3020
<b>Unipoint power connector kit</b>	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 Plus	Flammable	3	mA
	Toxic	3	mA
Sensepoint Pro	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)



# Our Product Range



## Fixed Gas Monitoring

Honeywell Analytics offers a wide range of fixed gas detection solutions for a diverse array of industries and applications including: Commercial properties, industrial applications, semiconductor manufacturers, energy plants and petrochemical sites.

- » Detection of flammable, oxygen and toxic gases (including exotics)
- » Innovative use of 4 core sensing technologies – paper tape, electrochemical cell, catalytic bead and infrared
- » Capability to detect down to Parts Per Billion (ppb) or Percent by Volume (%v/v)
- » Cost effective regulatory compliance solutions

## Portable Gas Monitoring

When it comes to personal protection from gas hazards, Honeywell Analytics has a wide range of reliable solutions ideally suited for use in confined or enclosed spaces.

These include:

- » Detection of flammable, oxygen and toxic gases
- » Single gas personal monitors – worn by the individual
- » Multi-gas portable gas monitors – used for confined space entry and regulatory compliance
- » Multi-gas transportable monitors – used for temporary protection of area during site construction and maintenance activities

## Technical Services

At Honeywell Analytics, we believe in the value of great service and customer care. Our key commitment is providing complete and total customer satisfaction. Here are just a few of the services we can offer:

- » Full technical support
- » Expert team on hand to answer questions and queries
- » Fully equipped workshops to ensure quick turnaround on repairs
- » Comprehensive service engineer network
- » Training on product use and maintenance
- » Mobile calibration service
- » Customised programmes of preventative/corrective maintenance
- » Extended warranties on products

### Find out more

[www.honeywellanalytics.com](http://www.honeywellanalytics.com)

### Contact Honeywell Analytics:

#### Europe, Middle East, Africa

Life Safety Distribution AG  
Wilstrasse 11-U31  
CH-8610 Uster  
Switzerland  
Tel: +41 (0)44 943 4300  
Fax: +41 (0)44 943 4398  
[gasdetection@honeywell.com](mailto:gasdetection@honeywell.com)

#### Americas

Honeywell Analytics Distribution, Inc.  
405 Barclay Blvd.  
Lincolnshire, IL 60069  
USA  
Tel: +1 847 955 8200  
Toll free: +1 800 538 0363  
Fax: +1 847 955 8208  
[detectgas@honeywell.com](mailto:detectgas@honeywell.com)

#### Asia Pacific

Honeywell Analytics Asia Pacific  
#508, Kolon Science Valley (1)  
187-10 Guro-Dong, Guro-Gu  
Seoul, 152-050,  
Korea  
Tel: +82 (0)2 2025 0307  
Fax: +82 (0)2 2025 0329  
[analytics.ap@honeywell.com](mailto:analytics.ap@honeywell.com)

### Technical Services

[ha.emea.service@honeywell.com](mailto:ha.emea.service@honeywell.com)

[www.honeywell.com](http://www.honeywell.com)

Locally available from

**ANSAC**

35, Marsiling Industrial Estate Road 3, #02-01 Singapore 739257

T: (65) 6368 0225 F: (65) 6368 8023

E: [sales@ansac-tech.com.sg](mailto:sales@ansac-tech.com.sg) | [www.ansac-tech.com.sg](http://www.ansac-tech.com.sg)

#### Please Note:

While every effort has been made to ensure accuracy in this publication, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines. This publication is not intended to form the basis of a contract.

H\_Unipoint\_DS0344\_V3\_EMEA

10/07

© 2007 Honeywell Analytics

**Honeywell**