Unipoint controller

Honeywell





The Unipoint, a simple DIN rail mounted controller

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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.



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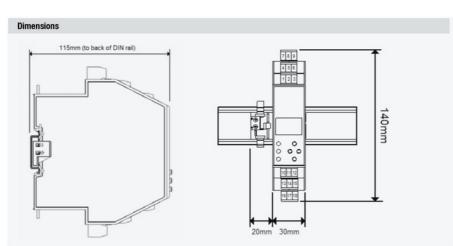


Installation Details





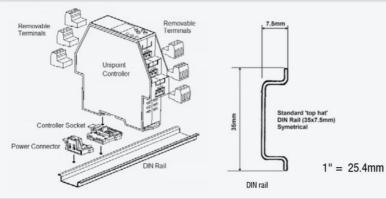




Terminal Detail

	1	+		
	2	S	Detector	
	3	-		
	1 2 3 4 5	NO	/	
	5	С	Fault	
	6	NC		
ı—	7	R	Reset	
* ~ ~ _	- 8		Inhibit	
<u> </u>	9	С	Common	
	10	NO		
	11	С	Alarm 1	
	12	NC		
	13	NO		
	14	С	Alarm 2	
	15	NC		
	16	NO		
	17	С	Alarm 3	
	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 0hms.	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	
		Fault	Alarm	
	Normal operation, no faults, no alarms. Zero cable resistance	Energised	De energised	2.4W1
mV	Normal operation, no faults, no alarms. Max loop cable resistance (28 ohms)	Energised	De energised	3.6W1
	All alarms, no faults. Max cable resistance (28 ohms)	Energised	Energised	4.8W1
^	Normal operation, no faults, no alarms. Inclusive of 2 wire signal loop current	Energised	De energised	1.8W ²
mA	All alarms, no faults. Inclusive of 2 wire signal loop current	Energised	Energised	3.0W ²

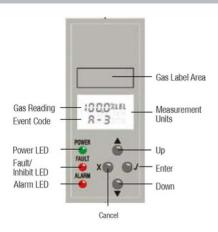
¹ includes power to detector ² excludes power to 3 wire mA detector. All controllers with default configuration.

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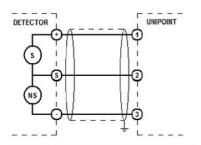


Technical Summary

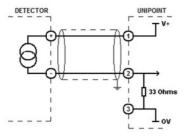




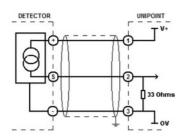
Dotootor	Wiring	Cohomotico
Detector	wiring	Schematics



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						
Use	The Unipoint controller provides in applications requiring flammable, control systems. Unipoint is designistalled into many different types hazardous area enclosures. It is cas any 2 or 3 wire 4-20mA gas of the control of the contr		e, toxic or Oxyge gned to use inc es of plastic or us designed for us	en gas detection dustry standard I metal, indoor or se with any mV 1	to be inc DIN rail al outdoor, h flammable	corporated into their lowing it to be easily nazardous or non e gas detector as well
User Interface						
Operation	Two pushbuttons for normal operation of resetting alarms and initiating self diagnostic test of syst Four buttons for user programmable functions via intuitive menu					
Backlit Display	Units of measure, digit	al gas read	ding and event	code		
Other Indication	Ultra-bright steady/flas In-built audible alarm 6			dition; alarm (rec	f), power	(green), fault (amber).
Termination	Easily accessible plug in screw type terminals. Terminals accept maximum wire diameter 1.5mm² (1				iameter 1.5mm² (16 AWG)	
Environmental						
IP Rating	Indoor, IP3x, to BS EN	60520-10	92 (controller to	he installed in	suitable e	enclosure)
Weight	225g (7.94 oz) - Contr		or loninnies it	, no moralida III :	Juliable 6	niologuicj
Operating Temp Range	-10°C to +40°C / 14°	,	-			
Operating Humidity Range	10 to 90%RH (non cor					
Operating Pressure Range	90-110kPa					
Storage	-25°C to +60°C / -13	°F to +14	0°F, 20 to 80%	RH (non conden	sina)	
Inputs	20 0 10 100 07 10	1 10 114	0 1, 20 10 00 10	rar (non conden	onig/	
Supply	Nominal 24Vdc (18-32 (excluding power to 3			.8W (including p	ower to	detector), mA= 3.0W
Detector Type	3 wire mV bridge e.g. Sensepoint or Signalpoint flammable gas detectors		powered e.g. Sensepoint output or Signalpoint toxic or Plus a Oxygen gas detectors toxic a		output Plus an	4-20mA, source e.g. Sensepoint Id Pro flammable, Id Oxygen gas
Detector Supply	2.4-8.6V, 200mA constant current. Maximum loop resistance: 28 0hms		Input (18-32Vdc)-1.5Vdc,		18-32Vdc)-1.5Vdc, nax	
Outputs						
Relays	Alarm 1	Alarm 2	2	Alarm 3		Fault
Rating	SPCO/3A, 240Vac/28Vdc (non inductive load)		3A, c/28Vdc ductive 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		ly rgised se on alarm setting	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/Talling Alarm on/off delay (0 to 900 seconds)*	Rising/i	ching ed/ rgised rip point	Latching/ non-latching Energised/ de-energised Alarm trip po Rising/falling Alarm on/off (0 to 900 sec	int delay	Latching/ non-latching Energised/ de-energised
Approvals						
EMC/RFI	EN50270					
Electrical Safety	EN61010, UL61010b					
•						
Performance	ATEX measuring function EN61779 (Independent accreditation expected late 2005)					

 $^{^{\}star}\, \text{Functionality only implemented in units supplied with software version 5V0.}\, \text{Available late 2005}.$

CE, TUV

Other

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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 Plus	Flammable	3	mA
	Toxic	3	mA
Sensepoint Pro	Flammable Toxic	3	mA 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)



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