Unipoint controller

Honeywell





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 systemsAnalyser houses
- Analysei nous
 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 calibrationRelays configurable as energized, de-energized,
- 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 analyzer 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.

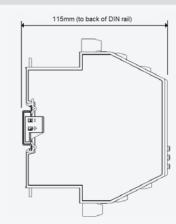
Unipoint's uncomplicated design makes it ideal for applications where a simple method of integrating gas detectors into a 3rd party control system is required or as part of a small standalone gas detection solution. All Honeywell Analytics gas detectors and third party detectors may be used with Unipoint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

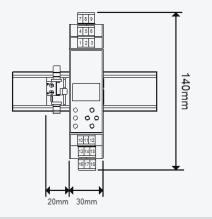


Installation details

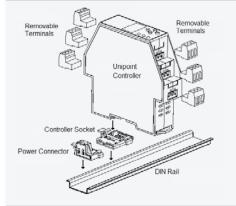


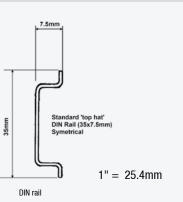
Dimensions

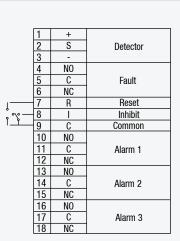




Installation







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

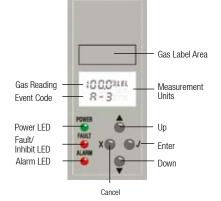
Unipoint Version	Controller Status		Relays	
		Fault	Alarm	
	Normal operation, no faults, no alarms. Zero cable resistance	Energized	De energized	2.4W ¹
mV	Normal operation, no faults, no alarms. Max loop cable resistance (28 ohms)	Energized	De energized	3.6W ¹
	All alarms, no faults. Max cable resistance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

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

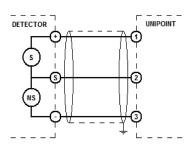
Terminal detail

Technical summary

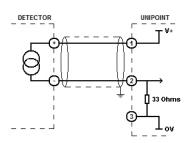




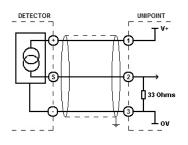
Detector Wiring Schematics



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							
Use	The Unipoint controlle applications requiring control systems. Unipo installed into many dif hazardous area enclos as any 2 or 3 wire 4-2	flammable pint is desig ferent type sures. It is g	, toxic or oxyge gned to use ind s of plastic or r designed for us	n gas detection lustry standard [netal, indoor or se with any mV f	to be inco DIN rail all outdoor, h lammable	orporated into their lowing it to be easily nazardous or non e gas detector as well	
User interface	,	0			,	,	
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/filashing 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	60529:199	92 (controller to	be installed in a	suitable e	nclosure)	
Weight	225g (7.94 oz) - Contr	oller only					
Operating Temp Range	-10°C to +40°C / 14°	F to 104°F	:				
Operating Humidity Range	10 to 90%RH (non cor	idensing)					
Operating Pressure Range	90-110kPa						
Storage	-25°C to +60°C / -13	°F to +140)°F, 20 to 80%	RH (non conden	sing)		
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		powered e.g. Sensepoint or or Signalpoint toxic or Pl oxygen gas detectors to		output e Plus an toxic an	3 wire, 4-20mA, source output e.g. Sensepoint Plus and Pro flammable, toxic and oxygen gas detectors	
Detector Supply	2.4-8.6V, 200mA constant current. Maximum loop resistance: 28 0hms		dc)-1.5Vdc, 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/3 240Vac	ЗА,	SPCO/3A, 240Vac/28Vo (non inductive		SPCO/3A, 240Vac/28Vdc (non inductive load)	
Default Setting	Non Latching Normally de-energized Energize on alarm Factory setting 10%FSD	Non Latching Normally de-energized Energize on alarm Factory setting 25%FSD		Latching Normally de-energized Energize on alarm Factory setting 50%FSD		Non Latching Normally energized De-energize on fault/power loss	
User Configurable Options	Latching/ non-latching Energized/ de-energized Alarm trip point Rising/falling Alarm on / off delay (0 to 900 seconds)*	Rising/f Alarm o	ching ed/ gized rip point	Latching/ non-latching Energized/ de-energized Alarm trip po Rising/falling Alarm on / of (0 to 900 sec	int f delay	Latching/ non-latching Energized/ de-energized	
Approvals							
EMC/RFI	EN50270						
Electrical Safety	EN61010, UL61010b						
Performance	ATEX measuring function	on EN6177	'9 (Independen	t accreditation e	xpected la	ate 2005)	
	CE, TUV						

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

Ordering information





Ordering Information						
Controllers						
Unipoint Controller (mV input version)		2306B2000	2306B2000			
Unipoint Controller (mA inp	out version)	2306B1000	2306B1000			
0						
Spares	(-)					
Unipoint Terminal Block Plug (x2)		2306B3010				
Unipoint DIN rail socket kit		2306B3020				
Unipoint power connector I	kit	2306B3030	2306B3030			
Required controller type referen	ce:					
Detector	Gas Type	No. Wires	Controller Required			
Signalpoint	Flammable Toxic	3 2	mV mA			
Sensepoint	Flammable Toxic	3 2	mV mA			
Sensepoint Plus	Flammable Toxic	3 3	mA 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)



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)
- Sost 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

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H_Unipoint_DS0344_V3_EMEA 09/07 © 2007 Honeywell Analytics

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