

HALO

Honeywell



**HALO LED Junction Box
with optional HART® Port**

HALO



Easy to use

- Clear device status provides enhanced safety
- Easier to locate a unit in fault/warning – reduces time for maintenance
- Allows convenient connection of an appropriately certified HART® handheld device
- No hot work permit required to connect handheld device

Local display

- LED light ring indicates status at a glance: -
 - Green – Normal
 - Red – Alarm
 - Yellow – Fault/Inhibit
- Simple configuration of alarm point and LED brightness

Suitable for wide range of applications

- Can be mounted in highly visible location
- Detector can be mounted remotely from HALO
- Backwards compatible with Searchpoint Optima Plus
- ATEX/IECEX hazardous area approval
- Ex e enclosure
- One M25 sensor entry, three M20 cable entries

Easy to Install

- Optional pipe mounting bracket
- Optional sunshade
- Optional retrofit adaptor plate

Status at a glance

The HALO Junction Box enhances the Searchpoint Optima Plus point infrared Hydrocarbon gas detector* by providing a local display showing the sensor status at a glance, even from a distance. It also gives convenient, non-intrusive interaction with a HART® handheld device through an optional intrinsically safe (IS) HART® connection point.

HALO uses three instantly recognisable ‘traffic light’ colours to indicate its status. The LED light ring shows green to indicate normal operation, yellow to indicate a fault/inhibit and flashes red to indicate an alarm. This allows anyone in the area to clearly and immediately see the status of any detector. This can be particularly useful to identify operational status if the detector is located in a difficult to access area or if a number of detectors are located in the same area.



Honeywell
Analytics
Light
O Ring

* Please see separate datasheet

HALO Overview



HALO is an ATEX/IECEX certified Ex e junction box for use with Searchpoint Optima Plus. It provides a local visual status indication, and an optional intrinsically safe non-intrusive HART® handheld device interface, for sensors that support HART® communication. It is suitable for use in either Zone 1 (gas) or Zone 21 (dust) hazardous areas.

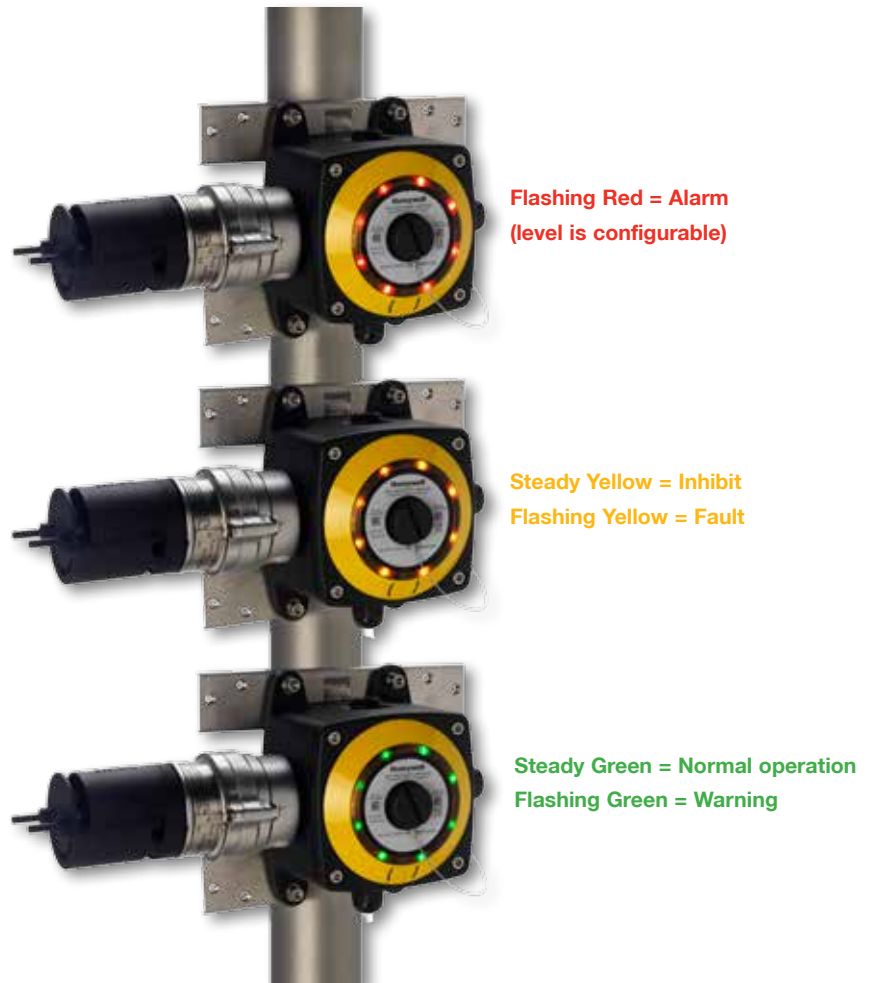
HALO has three M20 cable entries and one M25 sensor entry. Internally, the box has a continuity plate with two earth connection points, and a 12-way terminal block.

The box lid has a three colour light ring (green, yellow and red), and optional connections for a HART® handheld device. The light ring provides a status indication (see below).

Searchpoint Optima Plus Output	Light Ring	Status
Less than 1.5 mA	Flashing Yellow	Fault
1.5 to 2.5 mA	Steady Yellow	Inhibit
2.5 to 3.5 mA	Flashing Green	Warning
3.5 mA to Alarm Threshold*	Steady Green**	Normal
Greater than Alarm Threshold*	Flashing Red	Hazardous Gas Concentration

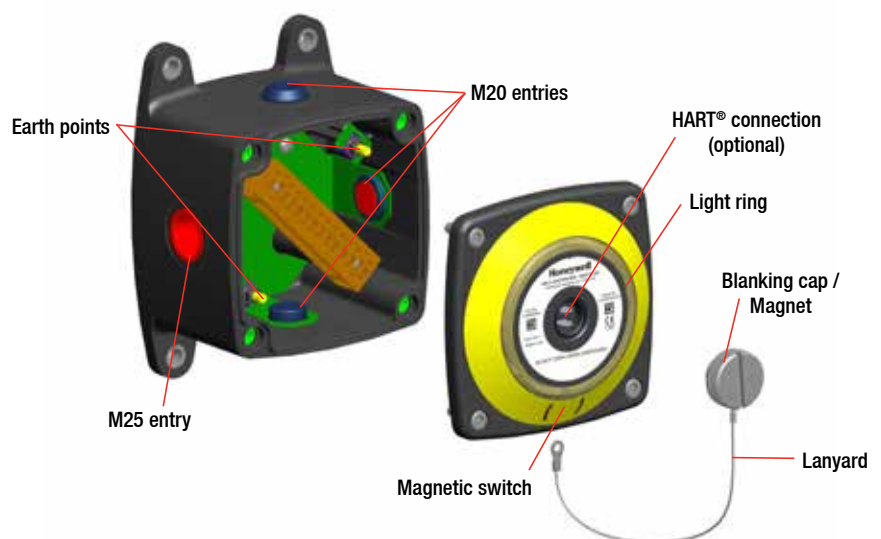
*Configurable between 10 and 65 %FSD

**Configurable to Full Brightness, Half Brightness or Off



The box is configured using a magnetic switch. A magnet is incorporated into the blanking cap which screws into the middle of the box lid when not in use. The following parameters can be configured: -

- Threshold for local alarm indication (red lights) can be set between 10 % and 65 %FSD
- Brightness of green LED lights can be set to Full Power, Half Power or Off

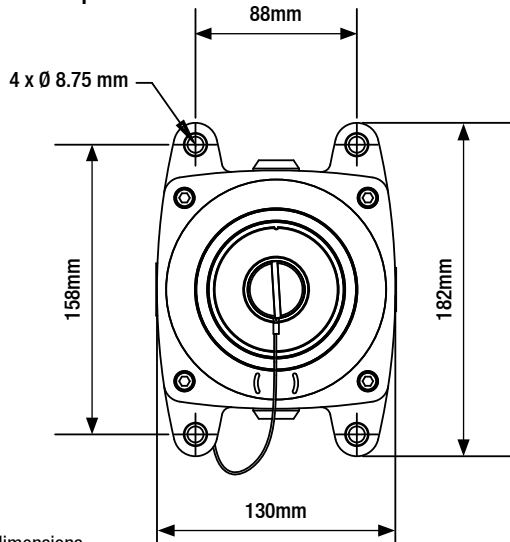


Installation Details

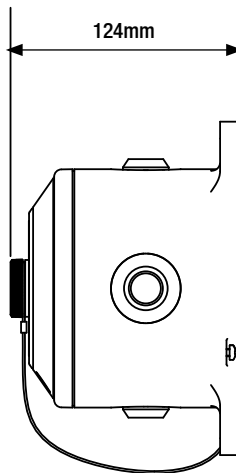


Mechanical

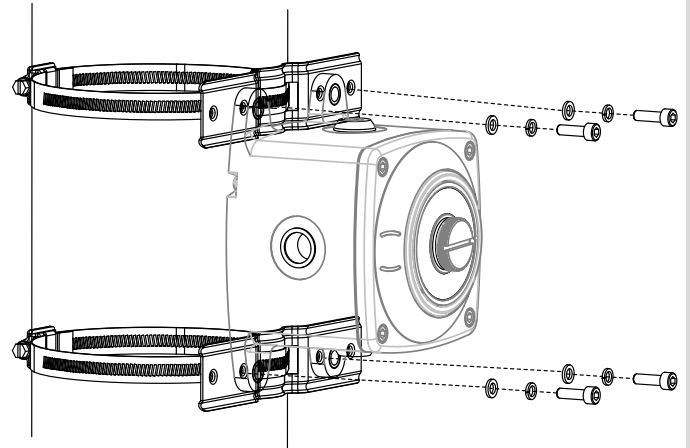
Installation Options



All dimensions
in mm.
25.4mm = 1 inch



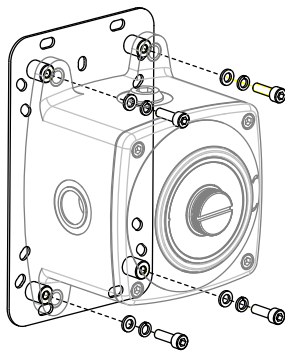
HALO can be mounted directly using the holes provided.



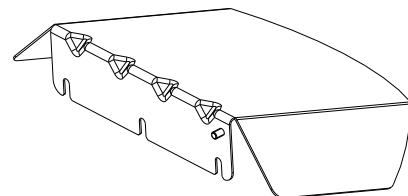
The optional Pipe Mounting Bracket is suitable for a horizontal or vertical pipe, diameter 50 to 150 mm (2 to 6 inches).

Unique new mounting bracket design: -

- Easier to install than traditional brackets
- Mounting straps hold to pole better than U-bolt style
- Exceeds vibration standard of EN 60079-29-1



The optional Retrofit Adaptor Plate enables HALO to be conveniently mounted in place of an existing DVC100 or Honeywell Analytics Junction Box. The plate has mounting holes corresponding to the hole centres of the DVC100 series and the Honeywell Analytics Junction Box.

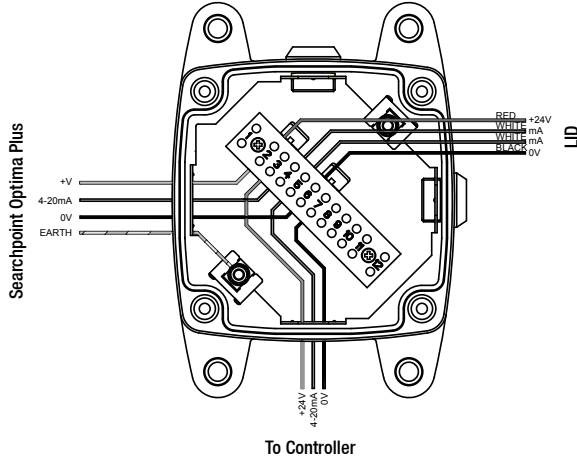


An optional sunshade is available which covers the HALO and extends over either side to also protect a sensor. The sunshade slots over the HALO mounting bolts so no additional fixings are required.

Installation, Technical Summary and Ordering Information



Electrical



Terminal Module Connections				
Terminal Number	Description	Field Wiring	Searchpoint Optima Plus Wiring	Lid Wiring
1	spare			
2	+V supply		+24 V	+24 V (red)
3	+V supply	+24 V		
4	mA loop		mA output	mA (white)
5	mA loop	mA output		mA (white)
6	-V supply		0 V	0 V (black)
7	-V supply	0 V		
8	spare			
9	spare			
10	spare			
11	spare			
12	spare			
Earth			Earth	

Technical Summary HALO Junction Box

Use	HALO is an ATEX/IECEx certified Ex e junction box for use with Searchpoint Optima Plus sensors. It provides a local status display, and an optional non-intrusive HART® interface for sensors that support HART® communication. It is suitable for use in either Zone 1 (gas) or Zone 21 (dust) hazardous areas.
Features	
Display	LED light ring – Red, Green, Yellow LED indication
Alarm Range	10 to 65%FSD in 5% increments
Environmental	
Operating Temperature	-40 °C to 65 °C
Operating Pressure	80 to 120 kPa
Operating Humidity	0 to 99 %RH (non-condensing)
Electrical	
Supply Voltage	18 to 32 Vdc
Power Consumption	1 W maximum
Insertion Loss	~25 Ω
Mechanical	
Material	Glass filled polyester, static dissipative
Weight	1.7 kg
Ingress Protection	IP66/67
Certification	
ATEX / IECEx	Baseefa 12ATEX0017 II 2 GD IECEx BAS 12.0011 Ex e ia mb IIC T5 Gb -40°C to +65°C Ex ia tb IIIC T100 °C Db
EMC	EN 50270:2006
RoHS	HALO is RoHS compliant
Performance	EN 60079-29-1 Approved Accessory

Ordering Information

Instruments		Spares	
2308B0903	HALO junction box ATEX/IECEx	2308B0970	Lid assembly – HALO ATEX/IECEx
2308B0941	HALO junction box Inmetro*	2308B0971	Lid assembly – HALO Inmetro*
2308B0947	HALO junction box GOST*	2308B0972	Lid assembly – HALO GOST*
2308B0953	HALO junction box CCCF*	2308B0973	Lid assembly – HALO CCCF*
2308B0900	HALO junction box with HART® connection ATEX/IECEx	2308B0974	Lid assembly – HALO with HART® connection ATEX/IECEx
2308B0940	HALO junction box with HART® connection Inmetro*	2308B0975	Lid assembly – HALO with HART® connection Inmetro*
2308B0946	HALO junction box with HART® connection GOST*	2308B0976	Lid assembly – HALO with HART® connection GOST*
2308B0952	HALO junction box with HART® connection CCCF*	2308B0977	Lid assembly – HALO with HART® connection CCCF*
Accessories		2308B0978	Blanking cap / magnet assembly including lanyard
2308B0934	HALO Sunshade	2308B0924	Terminal block spares assembly
2308B0930	Adaptor Plate Kit	2308B0969	Service spares kit
2308B0923	Pipe Mounting Bracket Kit		* Contact Honeywell Analytics for availability

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 four 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

Contact Honeywell Analytics:

Europe, Middle East, Africa, India

Life Safety Distribution AG
Javastrasse 2
8604 Hegnau
Switzerland
Tel: +41 (0)44 943 4300
Fax: +41 (0)44 943 4398
India Tel: +91 124 4752700
gasdetection@honeywell.com

Americas

Honeywell Analytics Inc.
405 Barclay Blvd.
Lincolnshire, IL 60069
USA
Tel: +1 847 955 8200
Toll free: +1 800 538 0363
Fax: +1 847 955 8210
detectgas@honeywell.com

Asia Pacific

Honeywell Analytics Asia Pacific
#701 Kolon Science Valley (1)
43 Digital-Ro 34-Gil, Guro-Gu
Seoul 152-729
Korea
Tel: +82 (0)2 6909 0300
Fax: +82 (0)2 2025 0388
analytics.ap@honeywell.com

Technical Services

EMEA: HAexpert@honeywell.com
US: ha.us.service@honeywell.com
AP: ha.ap.service@honeywell.com

www.honeywell.com

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We Save Lives

