

## ► Spyglass Xtend (V)

Hydrogen & hydrocarbon flame detector - Triple infrared IR3



### Product Description

The **Spyglass Xtend** is a new-generation flame detector that combines extreme accuracy with great versatility thanks to its combined technology for detecting hydrogen and hydrocarbon flames. It is based on an intelligent algorithm combined with IR3 technology, guaranteeing an ultra-fast response in as little as 40 ms. Designed for high-risk industrial environments, it guarantees reliable detection, even in the presence of dust, bad weather or sun glare. Its robust architecture meets the needs of critical installations. It can be used both indoors and outdoors, particularly in ATEX zones or in the presence of flammable gases. As an option, **Spyglass Xtend V** incorporates HD video functionality, enabling events detected to be viewed in real time, providing an additional layer of security.

### Caractéristiques techniques

**Detection:** Hydrogen and hydrocarbon flames

**Technology:** Triple IR

**Field of vision:** 90° / 80

**Sensitivity:** 5 levels

**Self-test:** Built-in (manual/automatic)

**Heated optics:** Yes

**Warranty:** 5 years

**Voltage:** 24 VDC (18-32 VDC)

**Power consumption:** 120 to 300 mA depending on options

**Outputs:** Relay (alarm/fault), Analogue 0-20 mA, HD Video (option), HART® 7.0 (option)

**Enclosure:** stainless steel, IP66/68

**Température:** -55 à +85°C

**Humidité:** 99 % HR

**Dimensions :** Xtend : 150x130x180 mm / 3,0 kg, Xtend-V : 200x130x130 mm / 4,4 kg

### Types of flame

Combustible	Taille flamme	Distance (m)	Temps de réponse
n-Heptane	0,1 m <sup>2</sup>	55	3,3 s
Kérosène	0,1 m <sup>2</sup>	50	4,8 s
Jet Fuel	0,1 m <sup>2</sup>	45	5,1 s
Diesel	0,1 m <sup>2</sup>	50	5,6 s
Essence (gazoline)	0,1 m <sup>2</sup>	40	7,3 s
Méthanol	0,1 m <sup>2</sup>	18	3,4 s
Bois	0,1 m <sup>2</sup>	20	6,9 s
GPL	Panache 97,5 cm	31	3,7 s
Gaz de syn-	Panache 97,5	25	3,9 s
Méthane	Panache 97,5 cm	20	4,4 s
Hydrogène	Panache 97,5 cm	30	4,0 s

### ► Environmental resistance

**Spyglass Xtend** is designed to withstand the most extreme conditions. It operates over a wide temperature range, from -55°C to +85°C, making it suitable for use in very cold or very hot environments. Its waterproof stainless steel casing, certified to IP66/68 and compliant with NEMA 4X and 6P standards, protects it from dust, water, humidity and even corrosive environments. It can withstand humidity levels of up to 99% without condensation, ensuring optimum long-term availability in all weather conditions.

### ► Universal power supply and connectivity

The **Spyglass Xtend** operates at a nominal voltage of 24 VDC, with an extended tolerance of 18 to 32 VDC. It has a low power consumption, with 120 mA in standard operation, rising to 180 mA when the heater is activated, and up to 300 mA with the HD video output option. It has two cable entries (¾" NPT or M25x1.5), compatible with cable cross-sections from 1 to 2.5 mm<sup>2</sup>. Its universal connectivity includes a 0-20 mA analogue output, relays for alarm, fault and pre-alarm status, a HART® version 7.0 digital interface for remote diagnostics and configuration, and an optional NTSC or PAL video output. A tricolour LED on the front panel provides real-time indication of device status (standby, alarm or fault).

### ► Certifications and reliability

**Spyglass Xtend** is ATEX, IECEx, FMus and FMc certified, for safe use in explosive or hazardous atmospheres. It also meets the requirements of international standards EN54-10 and ANSI FM 3260. In terms of functional safety, it is SIL2 validated to IEC 61508 for high and low type applications. Teledyne guarantees this detector for five years, demonstrating its robustness and reliability over time.