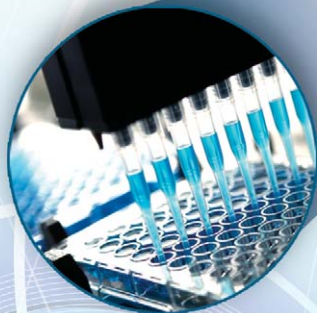# ADPRO Intrusion Detection

High-performance Intrinsically Safe Outdoor Passive Infrared Detectors for Hazardous Environments in Zone 1 and 2

BAS 11 ATEX 0261X
IECEx BAS 11.0127X
II2G Ex ib IIC T4 Gb
(-20 °C ≤ Ta ≤ +60 °C)

ADPRO®
by ◆ xtralis™

Main Applications

Intrusion detection — an "electronic fence" — in combination with alarm verification — video surveillance — protects property and prevents sabotage.

Hazardous areas, such as fossil fuel and chemical facilities, require high-performance intrusion detection. ADPRO by Xtralis offers defense-grade perimeter protection including ADPRO PRO Outdoor Intrinsically Safe Passive Infrared Detectors.
These systems, which detect temperature differences between moving targets and the stationary background, may be used safely to protect hazardous environments. ADPRO PRO Intrinsically Safe Passive Infrared detectors are ideally suited for use in the following hazardous environments:

Fossil fuel industry
- Oil and gas platforms and refineries
- Petrol, oil, kerosene storage
- Pump stations (railways, harbours, pipelines)

Chemical industry
- Chemical laboratories
- Chemical production sites
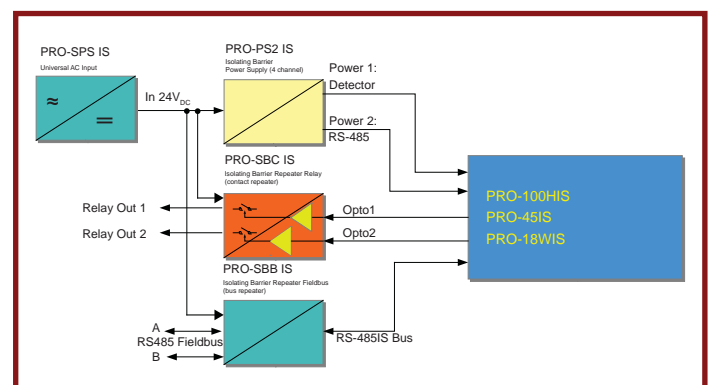- Pyrotechnic material production sites and warehouses

Others
- Electric power transformation substations
- Aircraft hangars and parking facilities for petrol/oil trucks
- Process industry

Technical Concept

Operation of a high-performance, intrinsically safe (IS) ADPRO PRO detector requires the installation of IS barriers for power, switching and communications.
The distance from the detector to the non-hazardous area can be up to 200 metres. ADPRO also offers IS barriers for power, switching and communications.

Standards Compliance

The ADPRO intrinsically safe detectors comply to the following standards:

IEC 60079-0 : 2011   Edition: 6.0
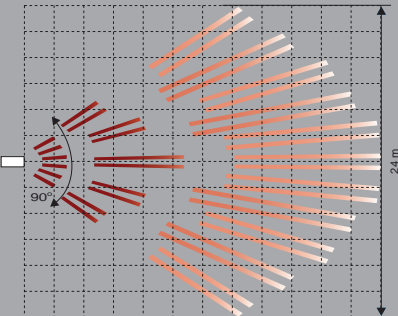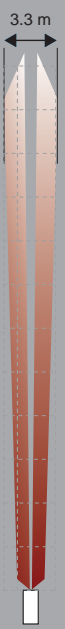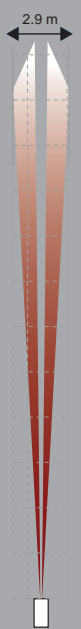Explosive atmospheres - Part 0: General requirements
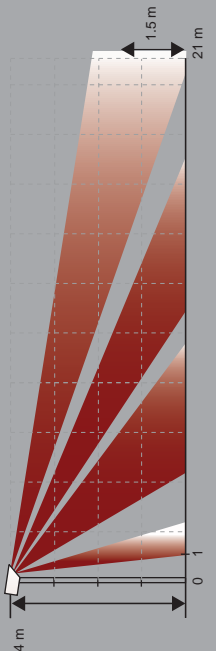
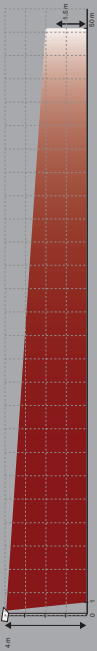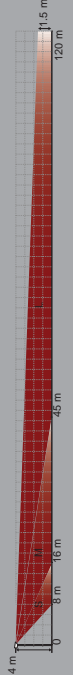**IEC 60079-11 : 2011-06   Edition: 6.0**
Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

IEC 60079-15 : 2010   Edition: 4
Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

ADPRO PRO Outdoor Passive Infrared Detector Reference Chart

DETECTOR OVERVIEW		
Detection method	Volumetric Wide-Angle	Curtain Medium-Range	Curtain Long-Range
Detector model	**PRO-18WIS**	**PRO-45IS**	**PRO-100HIS**
Item code	CH10051601	CH10021601	CH10030401
Coverage L x W	21 m x 24 m (70 ft x 80 ft)	50 m x 3.3 m (165 ft x 11 ft)	120 m x 2.9 m (394 ft x 9 ft)
Creep zone	1 m (3 ft)	1 m (3 ft)	8 m (26 ft)
Optics	Segmented Precision Mirror	Precision Mirror	
Top View **Width at Nominal Range**	90° 24 m	3.3 m	2.9 m
Side View	1.5 m 21 m 4 m		1.5 m 120 m 45 m 16 m 8 m 4 m

Technical Data	PRO-18WIS	PRO-45IS	PRO-100HIS
Power supply detector	U_i= 28 V_{DC}; I_i= 150 mA; P_i= 920 mW Note: power barrier required.		
Power supply RS 485	U_i= 28 V_{DC}; I_i= 150 mA; P_i= 920 mW Note: power barrier required.		
Heater Power	n.a		~600mW
Alarm Output	2x Opto-Coupler, U_i= 28 VDC; I_i= 20 mA; P_i= 55 mW Note: switching barrier required.		
Data Interface	RS 485, Ui=+/- 4.2 VDC; U_0= 4.2 VDC; I_0= 146 mA; P_0= 157 mW according to PNO-Standard; Note: data barrier required.		
Front Window	Silicon Wafer		
Spectral Response	8-14µm, double filtered		
Operating Temperature	-20 ºC to +60 ºC (-4 ºF to +140 ºF)		-40 ºC to +60 ºC (-40 ºF to +140 ºF)
Temperature Compens.	Full compensation over entire operating temperature range		
IP-Rating	IP65		
Baseefa ATEX Approval	BAS 11 ATEX 0261X IECEx BAS 11.0127X 〈Ex〉 II2G Ex ib IIC T4 Gb (-20 °C ≤ Ta ≤ +60 °C)		

► *WARNING!*
ADPRO PRO intrinsically safe PIR detectors are designed to be used with ADPRO IS barriers and must not under any circumstances be installed without ADPRO IS barriers.

Xtralis is the leading global provider of powerful solutions for the early detection of fire and security threats. Our technologies prevent disasters by giving users time to respond before life, critical infrastructure or business continuity is compromised. We protect more than 50,000 customer sites in 100 countries, including billions in assets belonging to the world's top governments and businesses.

Our portfolio of perimeter protection and enterprise security solutions delivers unparalleled situational awareness from your facility's edge to its very core so you can anticipate threats proactively to protect personnel and property.

With ADPRO by Xtralis, you can transform your security program from reactive, forensic monitoring to proactive detection. We offer the industry's broadest range of:

• Defense-grade perimeter protection
• Passive infrared and video motion detection
• Robust video recording and transmission
• Remote monitoring software
• Energy-efficient video storage
• Flexible and scalable IP access control
• Integrated command and control software

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