# DPRO PRO 🧾 Series Passive Infrared Perimeter Intrusion Detector



The complete new portfolio of ADPRO PRO E-PIR Perimeter Intrusion Detectors (PID) were engineered to provide extraordinary reliability and accuracy. This new generation of PIRs evolved from the Xtralis defense-grade perimeter protection technology and our proven series of ADPRO PRO PIRs.

Utilising Passive Infrared (PIR) technology and combining it with precision mirror optics, employing the latest digital signal processing (DSP) and an environmental adaptive circuitry - this provides the exceptional reliability of detection while minimising nuisance alarms.

ADPRO PRO E-Series detectors achieve unsurpassed performance even under precarious environmental conditions. The ADPRO PRO E-Series PIR detectors are available in a variety of models to optimally address your perimeter, performance, and budget needs.

## **PRO E-Series - Extraordinary Features**

#### **Complete New Housing Design**

- Designed for wall and pole mounting no additional adaptors required
- Integrated cable management no visible cable routing directly from mounting surface . Designed for one-man installation with the iCommission tool which allows for wireless control
- of the PIR detectors via the iCommission application installed on a smartphone or tablet PC
- Simple on-site exchange of the filter module (window) no detector factory overhaul
- Sophisticated 3D-tamper (pan/tilt/move) protection including a compass (slow panning)
- Detection of attempted removal from mounting surfaces also includes cable managed bracket
- Prepared for further enhancements and options such as IP connectivity, wireless . communication or even battery operation (in combination with renewable energy sources)

#### ADPRO PRO E-400H SLR — Superior Long-Range

- The "flagship" of ADPRO PRO E-detector series is worldwide the one and only "SLR"-PIR-PID with a nominal range of 220 m.
- Save installation cost due to reduced poles, cabling, number of detectors and installation time

#### "360PROtectTM" Technology - Near Surrounding Area Surveillance

- Special tamper protection of the detector eliminating creep zones
- 360PROtect<sup>™</sup> covers the area between up to 1m behind the detector and 8m in front of it

#### **Detector Masking**

Manipulation, vandalism, and/or tampering of the detector's input capability with objects such as metal, plastics, paper or sprayed paints or lacquers in close proximity to the detector are detected and indicated as required by EN and upcoming IEC-standards for perimeter detectors

#### **Quick Setup**

- No hardware programming via DIP-switches
- Via standard RS-485-communication or optional IP-module all parameters can be adapted

### **Data Sheet**

### **Product Highlights**

PRO E-Series detectors deliver exceptional savings of time and total cost of ownership.

- Designed to be compliant to EN 50606 Grade 3
- IP65-rated housing for all models iCommission for one man commissioning and installation
- Integrated Cable Management Invisible cable routing for tamper protection
- Remote configuration and alarm
- management via RS485-communication
- Auto-sensing supply voltage 10.5-30 V  $_{\rm DC}$  and 24 V  $_{\rm AC}$  Low power consumption ideal for wireless
- and solar applications Double-knock functionality of two detectors results into 7 detection zones, managed by FastTrace 2E /iFT-Series/CamDisc E ipVG-Series for accurate visual verification

#### Providing maximum tamper protection

- "360PROtect™" Technology near surrounding area surveillance, as a special tamper protection of the detector - from 1 m behind the pole/ wall up to 8m - eliminates all creep zones
- Detects attempted removal from mounting surface
- Advanced 3D-tamper detection signals an alarm if detector alignment is altered. Wireless RF-series are using a traditional housing cover switch
- Detector masking detection
- Up to 4 m (13 ft) mounting height
- to minimise the risk of vandalism Digital compass detects very slow horizontal misalignment

#### Highest reliability of detection - minimising nuisance alarms

- Directional discrimination for additional 60% nuisance alarm reduction (D-models only), allowing for right-to-left or left-to-right intrusion alarms only
- Heater and heavy-duty silicon wafer front window for -40° to +60° C (-40° to 140°F) operating temperature, ideal for extreme environments (standard for H-models)
- Detection of intruders crawling, walking or running at speeds from 0.2 to 5 m/s (0.7 to 16 ft/s)
- Ultra-low nuisance alarm rate thanks to
- advanced digital signal processing (DSP), and adaptive threshold discrimination Low cost per unit of coverage cutting edge and manufactured precision engineering results in a highly reliable, cost efficient product

#### Accessories

- iCommission One-Man-Commissioning-Tool including iCommission-App for remote controlled tilt adjustment
- PRO E-Tool configuration, commissioning, analysis and remote control software
- IFM-485-ST PC interface module including PRO-E-Tool software for PC-based installation, commissioning, maintenance and alarm management of all PRO detectors
- CT PRO 2 wireless walk-tester (2.4 GHz) for all PRO detectors
- AD 851 alignment telescope for all models PRO E-IPM optional build-in IP-Module for PRO E-detectors for a direct communication to a receiver PC or ADPRO FastTrace/iFTdevice (High Level Interface) via an Ethernet network



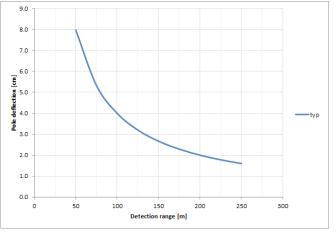
### 360PROtect<sup>™</sup> - Near Surrounding Area Surveillance

This Xtralis technology provides special tamper protection for all ADPRO PRO E-detectors. This innovation provides protection from 1 m behind the pole/wall installation up to 8 m - completely eliminating all creep zones. Cost savings and superior protection are realized with one ADPRO PRO E-detector; creep zones are eliminated and the areas behind and aside the detector are monitored. Regarding tamper security 360PROtect<sup>™</sup> technology puts ADPRO PRO E-detectors unambiguous on leading position.

### **Pole Deflection**

A small deflection will influence the detection range and can cause a significant number of false alarms. The following chart gives an overview showing the allowed pole deflection at various detection ranges.

E.g. a detection range of 200m requires a pole with maximum 2cm deflection under all environmental conditions. A detection range of 100m requires a pole with maximum 4cm deflection.



### ADPRO PRO E-Wireless Detectors - powered by Inovonics EchoStream<sup>®</sup>

Based on same technical specifications as wired models, Xtralis offers a supplemental range of wireless ADPRO PRO-E detectors with Inovonics' built-in RF module EN1941 for North America/ Australis, New Zealand or EE1941 for Europe:

#### PRO E-18WRFe, PRO E-18WRFn, PRO E-45RFe, PRO E-45RFn, PRO E-100RFe, PRO E-100RFn

 PRO E-100RFe, PRO E-100RFn
 [-RFe = 868 MHz (EU) / -RFn = 911 MHz (USA, Australia, New Zealand)]

 These detectors transmit alarms and fault messages one way wireless to an Inovonics receiver e.g. EE4232MR/EN4232MR or EE4216MR/EN4216MR.

The Inovonics Commercial Mesh Network has been specifically developed for commercial applications to provide the most cost-effective solution for a wide range of applications in a wireless sensor network.

#### Reliability

Inovonics EchoStream 868/900MHz radio utilizes a unique frequency hopping, spread spectrum technology to meet the demands of an increasingly cluttered wireless world.

#### Flexibility

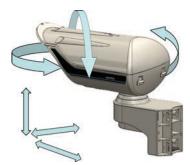
The flexibility of wireless is a necessity in today's dynamic commercial environments. The selfconfiguring EchoStream Commercial Mesh Network allows you to adapt to changing floor plans and requirements in a matter of minutes. New sensors can be added to the network as fast as they can be mounted.

#### Scalability

The EchoStream Commercial Mesh Network's backbone of intelligent repeaters EE5000/EN5000 can extend coverage to thousands of sensors across entire commercial campuses.

#### **Battery Life Time**

Under normal operating conditions a battery life time of 2 years with Alkaline batteries can be achieved. Depending on environmental conditions of operation, number of events and other site-specific influences, a battery replacement may be required earlier. The integrated intelligent power management handles different power sources to optimize the PIR's battery life time. For instance the use of Lithium batteries or external solar and power storage module will extend the battery life time.



### Sophisticated Tamper Protection

All ADPRO PRO E-detectors monitor:

- opening of detector housing and mounting bracket cover
- horizontal, vertical and pitch alignment
- slow horizontal movements with the help of an integrated switchable digital compass
- · removal from mounting surface

These features fullfill the highest tamper protection requirements and ensure reliable operation in the highest graded security applications.

### ADPRO PRO-E Detector Outputs

All ADPRO PRO E-detectors have 3 free programmable outputs for alarms from:

- PIR-sensor, 360PROtect<sup>™</sup> or masking detection
- fault events caused by the power supply, exceeded temperatures, faulty heating device, masking detection or watch-dog
- tamper alarms of housing cover, cable managed bracket cover, misalignment and removal from mounting surface attempts

All high-performance detectors (H-versions) offer additionally two independent outputs for alarms from:

 360PROtect<sup>™</sup>, masking or alarm zone or other events

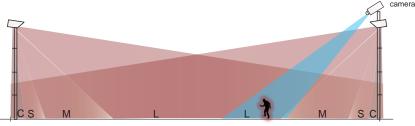
For plug & use, all outputs are set to standard compliant default settings, which can be changed easily with the ADPRO PRO E-Tool software.



### **Double-Knock Functionality**

ADPRO PRO E-100, PRO E-100H and PRO E-400H pointed at each other and linked together via an intrusion control panel or management station deliver "double knock" functionality. By cross zoning two detectors additional sub-zones are created, which can then be used for precise alarm localisation and subsequently camera positioning. This results not only in an ideal image section, but also in less false alarms, caused by wild animals or other environmental reasons.

Additionally optimally zoomed-in images can be used by video analytic functions of remote video gateway system like ADPRO FastTrace 2E, iFT and HeiTel CamDisc E and ipVG-Series for "triple knock" verification and response by operator in an alarm receiving center (ARC).



C=creep zone S=short range M=mid range L=long range

When an intruder appears, PIR alarms are activated and camera streams to ADPRO FastTrace 2E, iFT, CamDisc E or ipVG-Series for visual verification and response by operator.

#### Operation in low visibility with ADPRO FastTrace 2E/iFT-series

A fog detection input on the ADPRO FastTrace 2E/iFT and iFT-E allows PRO E-Series detectors to operate in poor visibility. When two PRO E PIR detectors are paired in an intelligent double-knock and the fog detection input is activated, the system automatically turns off the ATD of both PIR detectors, sets the sensitivity to the maximum and puts them into single knock in order to improve the detector's performance.

### **Recommended Ranges and Positioning**

ADPRO PRO E-series detectors offer the best value per foot of coverage when compared to similar effective intrusion detection technologies. ADPRO has pushed the limits of the PIR technology to new frontiers, thus making it the ideal choice for cost conscious decision makers unwilling to compromise on security.

Longer perimeters are easily divided into sections not exceeding the nominal range of the chosen detectors. The PRO E-detectors are designed to provide gap-free coverage in, around and behind the mounting location.

### Mounting

Recommended mounting height is 2.5 - 4 m (8 - 13 ft). All PRO E-detectors are ready-to-use on walls or poles without any adaptors and have an integrated tamper-monitored cable managed bracket.

### iCommission™

All detectors can be vertically aligned with a smartphone or tablet PC e.g. during walk-test remotely with the optional use of iCommission. With the help of iCommission one engineer can mount, aline, and fine-adjust a detector - one man commissioning for noticeable cost and time savings.



### **Remote Service**

All detectors are equipped with a two-way data port. Using the ADPRO PRO E-Tool software via the IFM-485-ST interface, configuration details and live signals, as seen by the detectors, can be changed and reviewed remotely.

The IFM-485-ST interface module and the ADPRO PRO E-software are very helpful during both the installation process, but also during operation later on. For example, detector configuration changes can be applied in real time without climbing any ladders.

### **Applications**

- Outdoor perimeter and area detection:
- solar fields
- pipelines
- logistic centers
- scrap merchants
- warehouses
- Fence-line protection
- Anticipating and proactive video surveillance
- Providing reliable detection for remotely monitored and detector activated CCTV systems for maximum Central Monitoring Station profitability
- Conditional triggering of CCTV, PTZ and dome cameras
- Conditional triggering of video-switchers for event-driven CCTV

## **System Design Considerations**

It is considered good design practise to terminate a detector's field of view with a barrier if the PIR field of view exceeds the desired detection zone, especially if it borders onto unknown or busy terrain. Wire mesh fence alone will not work, a closed surface area is necessary, wood or plastic materials are perfectly suitable.

For more details and a professional system design we strongly recommend to refer to the "*Planning and Commissioning Manual*" on:

www.xtralis.com/ADPRO\_PRO\_E\_Detectors





# Technical Specifications

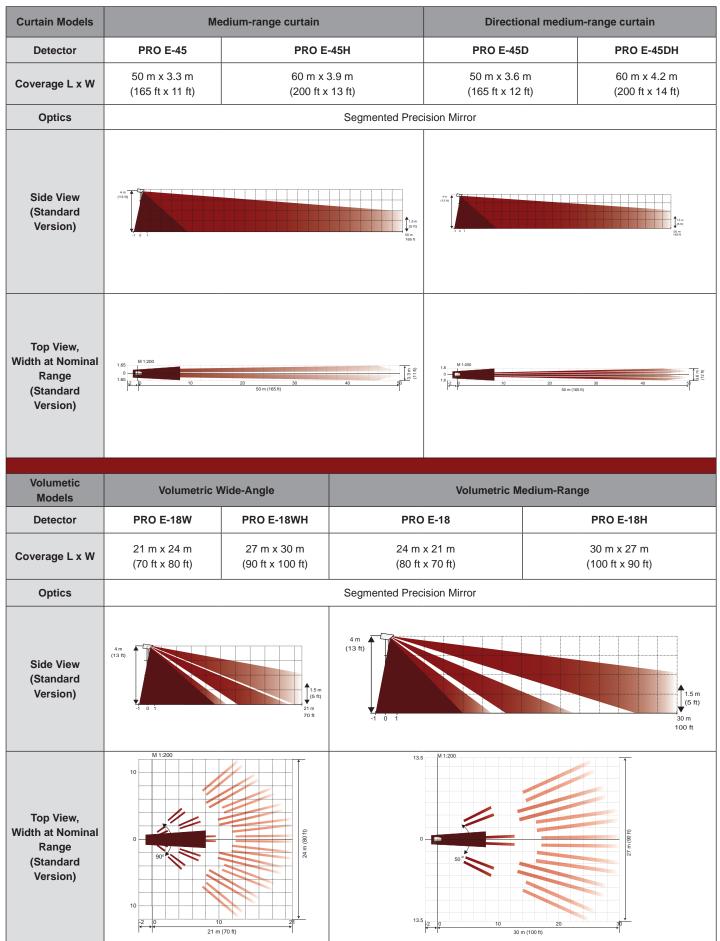
Angle of beam (angle of aperture, AA)         50°         50°         50°         15°         3.8°         3.8°           360PR Otcott <sup>114</sup> Near Surrounding Area         -1 m up to +8 m (3 ft up to +26 ft)         3.8°         3.8°           Spectral response         8-14µ, double fiftered         8-14µ, double fiftered         50°         15°         3.8°         3.8°           Spectral response         8-14µ, double fiftered         8-14µ, double fiftered         50°         15°         3.8°         3.8°           Pyroelectric Sensor (differential)         Standard versions: HDPE-Filter, IR transmissive / H-Versions: Silcon Wafer         3<									
International principle         Womanic with angle         Vomanic with angle         Vo	Specification / Model	PRO E-18	PRO E-18H	PRO E-18W	PRO E-18WH	PRO E-30	PRO E-40	PRO E-45	PRO E-45H
Nominal ange (L, W), With a form (L) (10 (1.9 M))         30 m - 20 m (10 (1.1 M))         00 m - 20 m (1.1 M))         00 m - 20 m (1.1 M M))         00 m - 2	Item Code	CH10055001	CH10055101	CH10053001	CH10053101	CH10063001	CH10073001	CH10023001	CH10023101
Width at nonlineal register         000 h x 70h         (100 h x 30h)         (100 h x 43 h)         (100 h x 41 h) <t< th=""><th>Detection principle</th><th>Volumetric m</th><th>edium-range</th><th colspan="2">Volumetric wide-angle</th><th colspan="2">Volumetric medium-range</th><th colspan="2">Curtain, medium-range</th></t<>	Detection principle	Volumetric m	edium-range	Volumetric wide-angle		Volumetric medium-range		Curtain, medium-range	
(arrige of aperture, AA)         30'         00'         00'         00'         10'         30'         10'         30'         10'         30'         10'         30'         10'         30'         10'         30'         10'         30'         10'         30''         10''         30''         10''         30''         10''         30''         10''         30''         10''         30''         10''         30'''         10'''         30'''         10'''         30''''         10''''         10'''''         10''''''''''''''''''''''''''''''''''''	Nominal range (L x W), width at nominal range								
Surveillance         Criminal for the first individual production           Spectral response         E-44.44, double filterents         Site of the filterents         Site of the filterents           Pyroelectric Sensor (differential)         Impact and the filterents         Site of the filterents         Site of the filterents           Detection speed range         0.2 - 6m (to 7.16 m)         3 <td< th=""><th></th><th>5</th><th>)°</th><th colspan="2">90°</th><th>50°</th><th>15°</th><th>3.8°</th><th>3.8°</th></td<>		5	)°	90°		50°	15°	3.8°	3.8°
Filter (Front Window)         Standard versions: HDPE-Filter, IR transmissive / H.Ventiane: Silicin Water           Pyroelectric Sansor (differential)         C2 - 5 mk (0.7 - 16 kp.)           Date: 0.2 - 5 mk (0.7 - 16 kp.)         C2 - 5 mk (0.7 - 16 kp.)           Alarm outputs (free programmable)         Alian m. Nam: Zenz, Kum (n.Resp. Zenz DURPCHOME), Hulle Currt Alian Targer Dracks Water, Alern Date Currt Alian Antana San (Jacob San (Jacob San (Jacob San (Jacob San Jacob San (Jacob San Jacob Jacob Jacob Jacob San Jacob San Jacob San Jacob San Jacob San Jacob San Jacob J	360PROtect™ - Near Surrounding Area Surveillance			-1 m up to +8 m (-3 ft up to +26 ft)					
Pyroelectric Sensor (differential)         index-tauned           Detection speed range         0.2 - 5 m/s (0.7 - 18 k/s)         3	Spectral response	8-14µ, double filtered							
Detection speed range         0.2 - 5 r/s (0.7 - 16 f/s)           Alarm outputs (free programmable)         3         5         3	Filter (Front Window)	Standard versions: HDPE-Filter, IR transmissive / H-Versions: Silicon Wafer							
Alarn outputs (ree programmable)         3         5         3         <	Pyroelectric Sensor (differential)	single-channel							
Alarm settings (tree programmable)       Alarm in Main Zone: Alarm Catego Zone (380 PROJect; Public Court, Alarm Tampor Bracker Switch, Alarm Cover Switch, Alarm Switch, Alarm Cover Switch, Alarm Switch, Alarm Cover Switch, Alarm Cover Switch, Alarm Switch	Detection speed range	0.2 - 5 m/s (0.7 - 16 ft/s)							
Alagminenting (new programmatory) Alagminent, Alam Arafmaking, Alam Fault (Prover Sopp), Temperature, Heating) Output load (max.) Alam Indicator Iremail LED (during commissioning) Data-Interface Iremail LED (during commissioning) Data-Interface Alam Indicator Is 4-456, 9600 bauduk / on-board Alguetments via Tool-Software Software Software Software Software Indicator Is 4-456, 9600 bauduk / on-board Alguetments via Tool-Software Software Software Software Alguetments via Tool-Software Software Software Indicator Is 4-456, 9600 bauduk / on-board Alguetments via Tool-Software Software	Alarm outputs (free programmable)	3	5	3	3	3	3	3	3
Alarm indicator       Internal LED (during commissioning)         Data-Interface       INternal LED (during commissioning)         Adjustments via Tool-Software Sensitivity       50 - 150% (default 100%)         - Range       Internal LED (during commissioning)         Cable feed (diameter)       Rubber seal for 4x 5-8mm cables and 4x 1-2mm wises         Cable feed (diameter)       Rubber seal for 4x 5-8mm cables and 4x 1-2mm wises         Cable termination (screw terminals)       0: 0.255 - 1.28 mm, A: 0.06 - 1.31 mm <sup>2</sup> , AWG: 30 - 16         Supply voltage       10.5 - 30 V <sub>20</sub> : 24 V <sub>ac</sub> +15% auto-sensing         Supply current       approx. 18 mA @ 12 V <sub>20</sub> : 12 m & 2.4 V <sub>ac</sub> = 45% auto-sensing         Heater power (H-versions only)       approx. 0.5 W / -41 m & 2.1 V <sub>20</sub> : 30 m & 0.2 4 V <sub>ac</sub> + 16% auto-sensing         Versions matching       Standard versions with HDPE-filter (no heater); 20 m & 0.2 (4 T m + 410 T); 100 mportative compensation         Housing material       Lurame S (ASA)         IP-Rate       IP 65         Environmental classification       Standard versions are for indoor HAHA Son by - not or outdoor perimeter detection!         Weight (incl. cable managed bracket)       approx. 1.5 tag approx. 1.5 tag approx. 1.5 tag approx. 1.5 tag (3.3 tab) approx. 1.5 tag (3.3 tab	Alarm settings (free programmable)	Alarm in Ma	n Zone; Alarm Cre Alig	eep Zone (360PRC Inment, Alarm Anti	tect); Pulse Count; masking, Alarm Fau	Alarm Tamper Brault (Power Supply,	acket Switch, Alarn Temperature, Hea	n Cover Switch, Al ting)	arm Detector
Data-Interface       RS-485, 8600 bauds // or-board         Adjustments via Tool-Software       S0 - 150% (default 100%)         - Range       n.a         Cable feed (diameter)       Rubber soal for 4x 5-8mm cables and 4x 1-2mm wires         Cable termination (screw terminals)       Ø: 0.256 - 1.29 mm, A: 0.06 - 1.31 mm <sup>2</sup> , AWG: 30 - 16         Stupply outrage       0: 0.256 - 1.29 mm, A: 0.06 - 1.31 mm <sup>2</sup> , AWG: 30 - 16         Stupply current       approx. 18 mA @ 12 V <sub>ac</sub> , 12 mA @ 24 V <sub>ac</sub> , 30mA @ 24 V <sub>ac</sub> , (@ + 25°C), excluding heater         Heater power (H-versions only)	Output load (max.)			3x (Standard) / 5	x (H-version) Solid	State Relais 75 m	A max. @ 60 V <sub>DC</sub>		
Agistrometers via Tool-Software       50 - 150% (adeukt 100%)         - Range       n.a         Cable feed (diameter)       Rubber seal for 4x 5-8mm cables and 4x 1-2mm wires         Cable feed (diameter)       0: 0.255 - 1.29 mm, 4: 0.05 - 1.31 mm <sup>2</sup> , AWG: 30 - 16         Supply voltage       0: 0.255 - 1.29 mm, 4: 0.05 - 1.31 mm <sup>2</sup> , AWG: 30 - 16         Supply voltage       0: 0.255 - 1.29 mm, 4: 0.05 - 1.31 mm <sup>2</sup> , AWG: 30 - 16         Supply current       approx. 18 mÅ 0! 2 V <sub>sc.</sub> 12 mÅ 0: 24 V <sub>sc.</sub> 30mA 0: 24 V <sub>sc.</sub> 10 + 26° C), excluding heater         Heater power (H-versions only)       paprox. 0.5 W / -41 mÅ 0! 2V C C and -40°C         Operating temperature and temperature (CABA)         P-Rate       IP 65         Environmental Classification       "scoope of EN 5013 / 1/ EC 62842 + 12010". Finance of C (CABA)         Weight (incl. cable managed bracket)       approx. 165 kg approx. 155 kg approx. 151 kg approx. 155 kg approx. 151 kg approx. 151 kg approx. 155 kg (3.33 kb) fg (3.	Alarm indicator	Internal LED (during commissioning)							
- Sensitivity         n.a           - Range         n.a           Cable feed (diameter)         Cable feed (diameter)           Cable feed (diameter)         0: 0.255 · 1.28 mm; A: 0.06 · 1.31 mm², AWG: 30 · 16           Supply voltage         0: 0.255 · 1.28 mm; A: 0.06 · 1.31 mm², AWG: 30 · 16           Supply voltage         0: 0.255 · 1.28 mm; A: 0.06 · 1.31 mm², AWG: 30 · 16           Supply current         approx. 18 mA @ 12 V <sub>m</sub> ; 12 mA @ 24 V <sub>w</sub> ; el 15% auto-sensing           Persenting temperature and temperature an	Data-Interface	RS-485, 9600 baud/s // on-board							
Cable feed (diameter)       Rubber seal for 4x 5-8mm cables and 4x 1-2mm wires         Cable termination (screw terminals)       Ø: 0.255 - 1.29 mm; A: 0.05 - 1.31 mm², AWG: 30 - 16         Supply voltage       105 - 30 V <sub>mc</sub> : 24 V <sub>xc</sub> : 15% auto-sensing         Supply current       approx. 18 M @ 12 V <sub>Dc</sub> : 12 M @ 24 V <sub>xc</sub> : (@ +25°C), excluding heater         Heater power (H-versions only)       approx. 0.5 W / -41 m & @ 12 VDC and -0°C         Operating temperature and temperature and temperature and temperature compensation       Standard version with Differ.Hender: -20°C Co + 60°C (-40° Ft to +140°T) Hender: -40°C Co + 60°C (-40°C Ft to +140°T) Hender: -40°C Co + 40°C	Adjustments via Tool-Software - Sensitivity	50 - 150% (default 100%)							
Cable termination (screw terminals)       2: 0.255 - 1.29 mm; A: 0.05 - 1.31 mm <sup>2</sup> ; AWG: 30 - 16         Supply current       10.5 - 30 V <sub>10</sub> , 24 V <sub>10</sub> , e15% auto-sensing         Supply current       approx. 16 m 4 il 2 V <sub>10</sub> , 12 m 4 il 2 V <sub>10</sub> , 30m 4 il 2 4 V <sub>10</sub> , (il + 25°C), excluding heater         Heater power (H-versions only)       approx. 0.5 W/ -11 m 4 il 12 VDC and -0°C         Operating temperature and te	- Range	n.a							
Supply voltage       10.5 - 30 V <sub>xc</sub> , 24 V <sub>xc</sub> ±15% auto-sensing         Supply current       approx. 18 m @ 12 V <sub>pc</sub> , 12 m @ 24 V <sub>xc</sub> , (@ +25°C), excluding heater         Heater power (H-versions only)       approx. 5.8 W / -41 m @ 12 VDc and -40°C         Operating temperature and temperatu	Cable feed (diameter)	Rubber seal for 4x 5-8mm cables and 4x 1-2mm wires							
Supply current       approx. 18 mA @ 12 V <sub>ac</sub> , 12 mA @ 24 V <sub>ac</sub> , 30mA @ 24 V <sub>ac</sub> , (@ +25°C), excluding heater         Heater power (H-versions only)       approx. 0.5 W/ -41 mA @ 12 Voc, 13 mA @ 24 V <sub>ac</sub> , (@ +25°C), excluding heater         Heater power (H-versions only)       Standard version with HDPE-filter (no heater), -20°C to 47°C, (14°°C to +140°F), H-version station over entre operating temperature and te	Cable termination (screw terminals)	Ø: 0.255 - 1.29 mm; A: 0.05 - 1.31 mm²; AWG: 30 - 16							
Heater power (H-versions only)       Image: Control of the second s	Supply voltage			1	0.5 - 30 V <sub>DC</sub> , 24 V <sub>AC</sub>	±15% auto-sensi	ng		
Standard version with HDPE-filter (no heater): -20 °C to +60 °C (-4 °F to +140 °F) H-version with Silicon Wafer and heater: -20 °C to +60 °C (-4 °F to +140 °F) H-version with Silicon Wafer and heater: -20 °C to +60 °C (-40 °F to +140 °F) Full compensation over entire operating temperature range         Housing material       Luran® S (ASA)         IP-Rate       IP 65         Environmental classification       Designed to fulfill EN50131-1 /IEC 62642-12010' Environmental Classification (Class IV - Outdoor) "Scope of EN 50131-1 /IEC 62642-standards are for indoor I&HAS only - not for outdoor perimeter detection!         Mounting       Wall and pole mounting — cable managed bracket (CMB) included         Weight (incl. cable managed bracket)       approx. 1.65 kg (3.33 lbs)       approx. 1.51 kg (3.44 lbs)         Dimensions (L x W x H)       S58 mm x 188 mm x 290 mm (14.1° x 7.4° x 11.4°)       Country of Origin       Luran® S (MAS III), EC 1907/2006+2011 (REACH), EU-Directive 2020/96/EG (WEEE) or do not fail under the scope of thescope of thesceller.         Warranty       24 months       ECN-Export Control Classif. Number       EAR-99       EAR-99       Ear-99       Ear-99       Designed to fulfill EN50131-1 / IEC 62642-1:2010' Security Grades 1 in combination with ADPRO FoasTrace/IntrusionTrace, only) '' Scope of EN50131-1 / IEC 62642-1:2010' Security Grades 1 in combination with ADPRO FastTrace/IntrusionTrace, only) '' Scope of EN50131-1 / IEC 62642-1:2010' Security Grades 1 in combi	Supply current		approx.	. 18 mA @ 12 V <sub>DC</sub> ,	12 mA @ 24 V <sub>DC</sub> , 3	80mA @ 24 V <sub>AC</sub> (@	2 +25°C), excluding	g heater	
Operating temperature and the performance of the periperiod of the periperiperiod of the periperiod of the periperiod of the periperiperiod of the periperiperiod of the periperiperiod of the periperiperiperiperiperiperiperiperiperi	Heater power (H-versions only)			app	rox. 0.5 W / ~41 m/	A @ 12 VDC and -	40°C		
IP-Rate IP-Rate IP-65 Invironmental classification Designed to fulfill ENS0131-1 / IEC 62642-1:2010° Environmental Classification (Class IV - Outdoor) Secope of EN 50131-1 / IEC 62642-standards are for indoor I&HAS only - not for outdoor perimeter detection Mounting Wall and pole mounting — cable managed bracket (CMB) included Weight (incl. cable managed bracket) approx. 1.51 kg (3.33 lbs) approx. 1.51 kg approx. 1.51 kg approx. 1.51 kg approx. 1.51 kg (3.33 lbs) approx. 1.51 kg approx. 1.51 kg approx. 1.51 kg (3.33 lbs) approx. 1.51 kg approx. 1.51 kg (3.33 lbs) approx. 1.51 kg (3.34 lbs) approx. 1.51 kg (3.33 lbs) approx. 1.51 kg (3.33 lbs) approx. 1.51 kg (3.33 lbs) approx. 1.51 kg (3.34 lbs) approx.	Operating temperature and temperature compensation		Sta H	I-version with Silic	on Wafer and heate	er: -40 °C to +60 °C	C (-40 ºF to +140 이	) °F) F)	
Environmental classification       Designed to fulfill EN50131-1 / IEC 62642-1:2010° Environmental Classification (Class IV - Outdoor)         Mounting       Wall and pole mounting — cable managed bracket (CMB) included         Weight (incl. cable managed bracket)       approx. 1.51 kg (3.33 lbs)       approx. 1.51 kg (3.33 lbs)<	Housing material				Luran®	S (ASA)			
Environmentation       "Scope of EN 50131-/ IEC 62642-standards are for indoor I&HAS only - not for outdoor perimeter detection!         Mounting       Wall and pole mounting — cable managed bracket (CMB) included         Weight (incl. cable managed bracket)       approx. 1.51 kg (3.33 lbs)       approx. 1.65 kg (3.33 lbs)       approx. 1.65 kg (3.33 lbs)       approx. 1.65 kg (3.33 lbs)       approx. 1.61 kg (3.33 lbs)       approx. 1.61 kg (3.33 lbs)       approx. 1.61 kg (3.33 lbs)       approx. 1.65 kg (3.34 lbs)       approx. 1.65 kg (3.34 lbs)       approx. 1.65 kg (3.33 lbs)       approx. 1.65 kg (3.34 lbs)       approx. 1.65 kg (3.44 lbs)       approx. 1.65 kg (3.45 lbs)	IP-Rate				IP	65			
Weight (incl. cable managed bracket)       approx. 1.51 kg       approx. 1.65 kg       approx. 1.51 kg       (3.33 lbs)	Environmental classification	-75	Designed to t Scope of EN 5013	fulfill EN50131-1 / i <b>1-/ IEC 62642-sta</b>	IEC 62642-1:2010 ndards are for ind	Environmental Cl	assification (Class not for outdoor p	IV - Outdoor) perimeter detection	n!
Weight (incl. cable managed blacker)       1'(3.33 lbs)       1'(3.64 lbs)       1'(3.64 lbs)       1'(3.33 lbs)       1'(3.64 lbs)       1'(3.64 lbs)       1'(3.33 lbs)       1'(3.33 lbs)       1'(3.33 lbs)       1'(3.64 lbs)       1'(3.64 lbs)       1'(3.33 lbs)       1'(3.33 lbs)       1'(3.33 lbs)       1'(3.64 lbs)       1'(3.33 lbs)       1'(3.33 lbs)       1'(3.64 lbs)       1'(	Mounting			Wall and pole	mounting — cable I	managed bracket	(CMB) included		
Country of Origin         Designed in Switzerland // Made in China           CE (incl. RoHS II, REACH, WEEE)         All ADPRO PRO E-Series products fulfill EU-Directive 2011/65/EU (RoHS II), EC 1907/2006+2011 (REACH), EU-Directive 2002/96/EG (WEEE) or do not fail under the scope of these directives.           Warranty         24 months           HTS-Harmonised Tariff Schedule         8531 9095           ECCN-Export Control Classif. Number         EAR-99           Security Grading         Designed to fulfill EN50131-1 / IEC 62642-1:2010° Security Grades 1-4 (Grade 4 in combination with ADPRO FastTrace/IntrusionTrace, only) ° Scope of ENS0131-x / IEC 62642- standard are for indoor I&HAS only - not for outdoor perimeter detection!           Perimeter Detection Standards         Designed to fulfill European EN50606-x and IEC standards           Other Standards & Pogulations         Birlish Standards: designed to fulfill BS 8418:2010	Weight (incl. cable managed bracket)				approx. 1.65 kg (3.64 lbs)				approx. 1.65 kg (3.64 lbs)
CE (incl. RoHS II, REACH, WEEE)       All ADPRO PRO E-Series products fulfill EU-Directive 2011/65/EU (RoHS II), EC 1907/2006+2011 (REACH), EU-Directive 2002/96/EG (WEEE) or do not fall under the scope of these directives.         Warranty       24 months         HTS-Harmonised Tariff Schedule       8531 9095         ECCN-Export Control Classif. Number       EAR-99         Security Grading       Designed to fulfill EN50131-1 / IEC 62642-1:2010° Security Grades 1-4 (Grade 4 in combination with ADPRO FastTrace/IntrusionTrace, only) ° Scope of ENS0131-x / IEC 62642- standard are for indoor I&HAS only - not for outdoor perimeter detection!         Perimeter Detection Standards       Designed to fulfill European EN50606-x and IEC standards         Other Standards & Pogulations       British Standards: designed to fulfill BS 8418:2010	Dimensions (L x W x H)			358 m	m x 188 mm x 290	mm (14.1" x 7.4" :	x 11.4")		
EU-Directive 2002/96/EG (WEEE) or do not fall under the scope of these directives.         Warranty       24 months         HTS-Harmonised Tariff Schedule       8531 9095         ECCN-Export Control Classif. Number       EAR-99         Security Grading       Designed to fulfill EN50131-1 / IEC 62642- 1:2010" Security Grades 1-4 (Grade 4 in combination with ADPRO FastTrace/IntrusionTrace, only)         'Scope of EN50131-x-/ IEC 62642- standard are for indoor I&HAS only - not for outdoor perimeter detection!         Perimeter Detection Standards       Designed to fulfill European EN50606-x and IEC standards         Other Standards & Populations       British Standards: designed to fulfill BS 8418:2010	Country of Origin			D	esigned in Switzerl	and // Made in Chi	na		
HTS-Harmonised Tariff Schedule       8531 9095         ECCN-Export Control Classif. Number       EAR-99         Security Grading       Designed to fulfill EN50131-1 / IEC 62642-1:2010" Security Grades 1-4 (Grade 4 in combination with ADPRO FastTrace/IntrusionTrace, only) "Scope of EN50131-x-/ IEC 62642- standard are for indoor I&HAS only - not for outdoor perimeter detection!         Perimeter Detection Standards       Designed to fulfill European EN50606-x and IEC standards         Other Standards & Populations       British Standards: designed to fulfill BS 8418:2010	CE (incl. RoHS II, REACH, WEEE)		All ADPRO PRO EU-E	E-Series products Directive 2002/96/E	fulfill EU-Directive	2011/65/EU (RoH) ot fall under the so	S II), EC 1907/200 cope of these direc	6+2011 (REACH), tives.	
ECCN-Export Control Classif. Number       EAR-99         Security Grading       Designed to fulfill EN50131-1 / IEC 62642- 1:2010" Security Grades 1-4 (Grade 4 in combination with ADPRO FastTrace/IntrusionTrace, only) "Scope of EN50131-x-/ IEC 62642- standard are for indoor I&HAS only - not for outdoor perimeter detection!         Perimeter Detection Standards       Designed to fulfill European EN50606-x and IEC standards         Other Standards & Perulations       British Standards: designed to fulfill BS 8418:2010	Warranty				24 m	onths			
Security Grading       Designed to fulfill EN50131-1 / IEC 62642-1:2010" Security Grades 1-4 (Grade 4 in combination with ADPRO FastTrace/IntrusionTrace, only)         Perimeter Detection Standards       Designed to fulfill EN50131-x-/ IEC 62642- standard are for indoor I&HAS only - not for outdoor perimeter detection!         Other Standards & Populations       British Standards: designed to fulfill BS 8418:2010	HTS-Harmonised Tariff Schedule				8531	9095			
Security Grading     '' Scope of EN50131-x-/ IEC 62642- standard are for indoor I&HAS only - not for outdoor perimeter detection!       Perimeter Detection Standards     Designed to fulfill European EN50606-x and IEC standards       Other Standards & Perimeter     British Standards: designed to fulfill BS 8418:2010	ECCN-Export Control Classif. Number				EAF	2-99			
Other Standards & Regulations British Standards: designed to fulfill BS 8418:2010	Security Grading	Designed to ful	fill EN50131-1 / IE Scope of EN50131	C 62642-1:2010 <sup>-)</sup> - <b>x-/ IEC 62642- s</b> t	Security Grades 1-4 andard are for inc	4 (Grade 4 in comb loor I&HAS only	bination with ADPR	O FastTrace/Intrus	sionTrace, only)
	Perimeter Detection Standards			Designed	o fulfill European E	N50606-x and IEC	C standards		
The boognou to tamin the of the printy, the other bound of the other bound of the other hand the other hand bound of the other hand the other hand bound of the other hand the other hand bound of the	Other Standards & Regulations	VdS: Designed t	o fulfill VdS 3143 (l					PRO FastTrace/Intr	usionTrace, onlv)

# Technical Specifications

Specification / Model	PRO E-45D	PRO E-45DH	PRO E-100	PRO E-100H	PRO E-400H	
Item Code	CH10023201	CH10023301	CH10033001	CH10033101	CH10100001	
Detection principle	Curtain, directior	nal, medium-range	Curtain, long-range	Curtain, long-range / precision glass mirror	Curtain, superior long-range / precision glass mirror	
Nominal range (L x W), width at nominal range	50 m x 3.6 m (165 ft x 12 ft)	60 m x 4.2 m (200 ft x 14 ft)	120 m x 2.9 m (400 ft x 9 ft)	150 m x 3.3 m (500 ft x 11 ft)	220 m x 5.1 m (722 ft x 17 ft)	
Angle of beam		4°	1.3°			
(angle of aperture, AA) 360PROtect <sup>™</sup> - Near Surrounding Area		-1	m up to +8 m (-3 ft up to +26	ft)		
Surveillance Spectral response	8-14µ, double filtered					
Filter (Front Window)	Standard versions: HDPE-Filter, IR transmissive / H-Versions: Silicon Wafer					
Pyroelectric Sensor (differential)	dual-channel triple-channel					
Detection speed range	0.2 - 5 m/s (0.7 - 16 ft/s) 1 - 3 m/s				1 - 3 m/s (3.3 - 9.8 ft/s)	
Alarm outputs (free programmable)	3 5		3	5	5	
Alarm settings (free programmable)	Alarm in Main Zone; Al	arm Creep Zone (360PROtect Alignment, Alarm Antimas	;); Pulse Count; Alarm Tampe king, Alarm Fault (Power Sup	r Bracket Switch, Alarm Cove ply, Temperature, Heating)	r Switch, Alarm Detector	
Output load (max.)		3x (Standard) / 5x (H	I-version) Solid State Relais 7	75 mA max. @ 60 V <sub>DC</sub>		
Alarm indicator	Internal LED (during commissioning)					
Data-Interface	RS-485, 9600 baud/s // on-board			ırd		
Adjustments via Tool-Software - Sensitivity	50 - 150% (	default 100%)	50 - 150% (0	50 - 150% (default 100%)		
- Range			60/72/84/96/108/120 m 75/90/105/120/135/150 m		132/145/176/198/220 m	
Cable feed (diameter)	Rubber seal for 4 x 5 - 8 mm cables and 4 x 1 - 2 mm wires					
Cable termination	Screw terminals 0.34 mm <sup>2</sup> to 1,5 mm <sup>2</sup> (AWG 28 -16)					
Supply voltage		10.5	- 30 V <sub>DC</sub> , 24 V <sub>AC</sub> ±15% auto-se	ensing		
Supply current		approx. 18 mA @ 12 V <sub>DC</sub> , 12	mA @ 24 V <sub>DC</sub> , 30mA @ 24 V <sub>A</sub>	<sub>c</sub> (@ +25°C), excluding heate	r	
Heater power (H-versions only)		approx.	0.5 W / ~41 mA @ 12 V <sub>DC</sub> ar	nd -40°C		
Operating temperature and temperature compensation		H-version with Silicon V	PE-filter (no heater): -20 °C to Vafer and heater: -40 °C to +6 tion over entire operating tem	60 °C (-40 °F to +140 °F)		
Housing material			Luran <sup>®</sup> S (ASA)			
IP-Rate			IP 65			
Environmental classification	Desig <sup>•</sup> <b>Scope of E</b>	ned to fulfill EN50131-1 / IEC <b>N 50131-/ IEC 62642-standa</b>	62642-1:2010 <sup>°)</sup> Environmenta rds are for indoor I&HAS or	al Classification (Class IV - O <b>nly - not for outdoor perime</b>	utdoor) ter detection!	
Mounting		Wall and pole mou	nting — cable managed brac	ket (CMB) included		
Weight (incl. cable managed bracket)	approx. 1.51 kg (3.33 lbs)	approx. 1.65 kg (3.64 lbs)	approx. 1.65 kg (3.64 lbs)	approx. 1.65 kg (3.64 lbs)	approx. 1.65 kg (3.64 lbs)	
Dimensions (L x W x H)		358 mm x	188 mm x 290 mm (14.1" x 7	.4" x 11.4")	1	
Country of Origin		Desig	ned in Switzerland // Made in	China		
CE (incl. RoHS II, REACH, WEEE)	All ADPR	O PRO E-Series products fulfi EU-Directive 2002/96/EG (	II EU-Directive 2011/65/EU (F WEEE) or do not fall under th		(REACH),	
Warranty			24 months			
HTS-Harmonised Tariff Schedule			8531 9095			
ECCN-Export Control Classif. Number			EAR-99			
Security Grading		1-1 / IEC 62642-1:2010 <sup>*)</sup> Secu <b>N50131-x-/ IEC 62642- stand</b>				
Perimeter Detection Standards		Designed to f	ulfill European EN50606-x and l	EC standards		
Other Standards & Regulations	VdS: Designed to fulfill	British Sta /dS 3143 (PIR), VdS3456 and V	ndards: designed to fulfill BS		race/IntrusionTrace. onlv)	

## Nominal Detection Ranges

### **Detector Overview**



## Nominal Detection Ranges

### **Detector Overview**

Curtain Models		Long-range curtain	
Detector	PRO E-100	PRO E-100H	PRO E-400H
Coverage L x W	120 m x 2.7 m (400 ft x 9 ft)	150 m x 3.3 m (500 ft x 11 ft)	220 m x 5.1 m (722 ft x 17 ft)
Optics	Segmented Precision Mirror	Precisio	n Glass Mirror
Side View (PRO E-100)	ta f		
Top View, Width at Nominal Range (PRO E-100)	135 M 1200 135	40 50 60 70 60 120 m (400 %)	90 100 110 <b>1</b> 10
Volumetric Models		Volumetric Medium-Range	
	PRO E-30	Volumetric Medium-Range	PRO E-40
Models	<b>PRO E-30</b> 30 m x 20 m (100 ft x 65 ft)	Volumetric Medium-Range	<b>PRO E-40</b> 40 m x 10 m (130 ft x 33 ft)
Models Detector	30 m x 20 m	Volumetric Medium-Range	40 m x 10 m
Models Detector Coverage L x W	30 m x 20 m		40 m x 10 m

### **Benefits and Value Propositions**

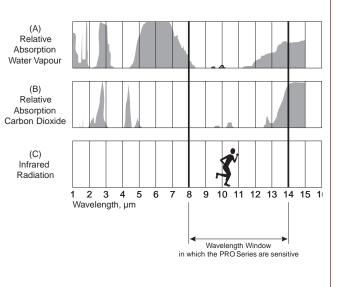
Intrusion detection - an "electronic fence" - in combination with alarm verification - video surveillance - protects property and prevents sabotage. Technologies from Xtralis anticipate disasters by giving users time to respond before life, critical infrastructures or business continuity is compromised.

- "360PROtect™": Near Surrounding Area Surveillance for earliest detection of sabotage attempts and elimination of creep zones. 360PROtect™ results in less detectors, less poles and thus lowest total cost of ownership (TCO)
- "Detector Masking Detection": Efficient means to detect attempts to defeat the detector by manipulating (masking) with material impermeable to infrared energy, such as paper, tape, film, or spray, typically during normal business hours when the security system is disarmed. "CMB Integrated": The integrated cable managed bracket (CMB) allows completely hidden cable routing and makes tamper attacks very difficult
- "PA Integrated": The completely new PRO E-detector housing is designed to be mounted directly onto a wall or a pole - no pole adaptors (PA) needed resulting in less installation cost
- "Best-in-Class by FAR": Delivers the lowest nuisance alarm rates, thus best alarm rate
- Remote access for configuration and management (via RS-485 databus) even over IP
- "Compass Inside": An integrated switchable compass enhances the 3D-anti-vandal feature to detect alignment changes
- 4 meters (13 ft) mounting height for minimal risk of vandalism
- Wide power supply range 10.5 to 30  $\rm V_{\rm nc}$  or 24  $\rm V_{\rm AC}$  (auto-sensing)
- All H-models have an internal heater with temperature compensation to prevent condensation on internal components
- No need for separate transmitter and receiver units PIR-technology allows for single-ended operation for lower installation cost
- Low installation and maintenance cost

### Advanced Passive Infrared Detection Technology

After 25 years of positive results in favor of durable performance and longevity in harsh environments from PIR outdoor detector technology, it is now widely accepted to be well suited for perimeter protection in harsh environments.

- The area protected by the detector cannot be identified by an intruder due to the passive nature of the unit
- It's easily adaptable for small single detector installations up to large, high security multidetector applications



### **Xtralis Security Solutions Overview**

Xtralis offers a powerful portfolio of perimeter, multi-site and enterprise security solutions that lead the industry in reliability and value. ADPRO by Xtralis technologies deliver unparalleled situational awareness from the edge of your facility to its very core, transforming your security program from reactive monitoring to proactive threat detection.

- Intrusion Detection and Perimeter Security
- Video Recording, Transmission and Storage
- Remote Monitoring/Central Monitoring Stations
- Access Control
- **Enterprise Security**
- Traffic Detection
- Mobile Security Solutions

#### www.xtralis.com

The wavelength of infrared absorption of primary

atmospheric constituents

humans

compared to the wavelength of

infrared radiation produced by

UK and Europe +44 1442 242 330 D-A-CH +49 431 23284 1 The Americas +1 781 740 2223

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