



CSIRO Verification Services Clayton, Victoria, Australia +61 13 0036 3400 https://activfire.csiro.au

# **Certificate of Conformity**



# **Product designation**

#### Xtralis, OSID, beam type smoke detection system

(Refer to the Schedule/enclosures for further specified details)

#### Agent/distributor

#### **Xtralis Pty Ltd**

4 North Drive, Virginia Park, 236-262 East Boundary Road, BENTLEIGH EAST, VIC, AUSTRALIA, 3165

#### Registrant

#### **Xtralis Pty Ltd**

4 North Drive, Virginia Park, 236-262 East Boundary Road, BENTLEIGH EAST, VIC, AUSTRALIA, 3165

## Producer

**Xtralis Pty Ltd** 

4 North Drive, Virginia Park, 236-262 East Boundary Road, BENTLEIGH EAST, VIC, AUSTRALIA, 3165

# **Conformance criteria and evaluation**

The Xtralis, OSID, beam type smoke detection system has been evaluated and verified as conforming with the relevant requirements of the following criteria.

Australian Standard AS 7240.12-2007, 'Fire detection and alarm systems - Part 12: Line type 1. smoke detectors using a transmitted optical beam'.

# Limitations/conditions of conformance

Limitations/conditions of conformance, where identified on this certificate, are derived from qualifications from evaluation(s) for conformity and/or other related technical documentation. All details with respect to design, assembly and installation instructions and restrictions should be checked against the producer's current technical manual/data sheets and the requirements of the Authority having Jurisdiction.

Specified limitations/conditions, determined from the evaluation for conformity, include the following.

Compatibility of this fire detector and its base assembly with new or existing control and i. indicating equipment should be verified prior to installation.

#### This certification is issued within the scope of CSIRO Verification Services - Rules governing ActivFire Scheme and is valid only for the product(s) as submitted for evaluation and verification of conformity, subject to the following conditions

- Reference to details, limitations and requirements, where documented as a schedule/enclosure with this certificate.
- The Registrant is responsible for their attestation of conformity and ensuring that on-going production complies with the conformance criteria defined in this certificate.
- This certificate will not be valid if any changes or modifications are made to the product which have not been notified and validated by CSIRO Verification Services.
- This certificate is subject to periodical re-validation upon verification that all requirements, as determined by the conformity assessment body, continue to be satisfactorily met by the Registrant.
- This certificate may only be reproduced in its published form, without modification and inclusive of all schedules/enclosures.
- Any changes, errors or omissions, must be submitted in writing and if necessary or requested, substantiated with relevant evidence.
- Any representations, such as advertising or other marketing related activities or articles shall reflect the correct contents of this certificate and conform with all relevant trade practices .and consumer protection legislation and regulations.
- Any terms or conditions of use as applicable to content and documentation as published or accessed through web sites administered by the CSIRO Verification Services.

Issued by

Kaj Loh Executive Officer – ActivFire Scheme





This certificate remains the property of CSIRO and may be subject to amendment, suspension or withdrawal at any time. The validity and authenticity of this certificate can be verified by the certification register located at https://activfire.csiro.au

# Schedule to Certificate of Conformity

| Certificate num. | <b>Registration date</b> | Version      |                          | Valid until |                           |
|------------------|--------------------------|--------------|--------------------------|-------------|---------------------------|
| afp - 2539       | 8-Dec-2011               | Number<br>13 | Issue date<br>1-May-2023 | 30-Apr-2024 | Page <b>2</b> of <b>2</b> |

### **Producer's description**

The Xtralis, OSID, beam type smoke detection system operates by measuring the attenuation of two wavelengths of light projected from one or more locations within an area of protection.

Each system consists of one Imager and up to seven Emitters within the protected area. The Emitters are placed in the field of view of the Imager. Each Emitter projects a wide-angled beam containing a sequence of ultraviolet (UV) and infrared (IR) light pulses toward the Imager. The sequence of pulses is unique for each Emitter, which prevents mutual interference and enables the Imager to reject any other unwanted light sources.

Smoke particles entering a beam path will interact strongly with the shorter wavelength and cause a loss mainly in the UV signal. The relative path loss measurement between the UV and IR signal is used to determine if there is smoke and produce an attenuation value. If the level of attenuation caused by smoke is higher than the preset threshold in the detector, a Fire Alarm will be reported.

# **Technical specification**

The following details are a representative extract of the technical specification for the Xtralis, OSID, beam type smoke detection system and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Imagers available as part of the Xtralis, OSID, beam type smoke detection system.

| Model  | Horizontal Field of View |
|--------|--------------------------|
| OSI-10 | 7°                       |
| OSI-45 | 38°                      |
| OSI-90 | 80°                      |

Emitters available as part of the Xtralis, OSID, beam type smoke detection system.

| Model     | Description    | Power supply          |  |
|-----------|----------------|-----------------------|--|
| OSE-SP    | Standard Power | 5 yr Li Battery       |  |
| OSE-SPW   | Standard Power | Wired                 |  |
| OSE-SP-01 | Standard Power | 5 yr Alkaline Battery |  |
| OSE-HPW   | High Power     | Wired                 |  |

| General                         |  |  |
|---------------------------------|--|--|
| Alarm thresholds (configurable) | Low level, Medium level or High level  |  |
| Alarm latching (configurable)   | Latching / non-latching configured via DIP switch.   |  |
| Status LEDs (Imager)            | Red: Fire Alarm; Bi-color Yellow / Green: Trouble or Normal.   |  |
| IP Rating                       | IP 44 for electronics; IP 66 for optics enclosure  |  |
| Electrical                      |  |  |
| Imager supply voltage           | 20-30 VDC (24 VDC nominal)   |  |
| Imager current consumption      | Typical at 24 VDC: 8 mA (one emitter), 10 mA (seven emitters) Peak at 24 V during Training Mode: 31 mA |  |
| Emitter current consumption     | Externally-powered emitter: 350mA at 24 Vdc battery-powered Emitter1,2: Built-in 5 Year Battery        |  |
| Cable gauge                     | 0.2 - 4mm <sup>2</sup> (26-12 AWG)   |  |
| Trouble / fault relay           | 2 A @ 30 Vdc, NO-C-NC dry relay contacts.  |  |
| Fire alarm relay                | 2 A @ 30 Vdc, NO-C-NC dry relay contacts.  |  |
| Heater input power              | 24 VDC, 16 mA (400 mW)   |  |
| Environmental                   |  |  |
| Operating temperature           | -10°C to 55°C  |  |
|                                 | 10 to 95% RH non-condensing.   |  |
| Humidity                        | Optional internal heating is provided to prevent condensation on the front surface. Emitters do not    |  |
|                                 | require heaters.   |  |
| Mechanical                      |  |  |
| Dimensions (W x H x D)          | 208 mm x 136 mm x 96 mm  |  |
| Weight                          | Imager: 610 g; emitter (battery powered): 1.2 kg, Emitter (wired): 535 g,                              |  |
| Adjustment angle                | Horizontal: ± 60°; Vertical: ± 15°   |  |
| Maximum misalignment angle      | ± 2°   |  |