



# Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
<b>afp - 2129</b>	12-Sep-2007	Number 18	Issue date 8-Apr-2024	30-Apr-2025

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## Product designation

**System Sensor, Model 2151BPI, nom. sens. (S)=7.0% obs./m, photoelectric smoke detector**  
(Refer to the Schedule/enclosures for further specified details)

## Agent/distributor

Pertronic Industries Pty Limited  
Unit B2, Hallmarc Business Park, 2A Westall Road, SPRINGVALE, VIC, AUSTRALIA, 3171

## Registrant

Pertronic Industries Pty Limited  
Unit B2, Hallmarc Business Park, 2A Westall Road, SPRINGVALE, VIC, AUSTRALIA, 3171

### Producer

Xi'an System Sensor Electronics, Ltd  
28 Tuan Jie South Road, Xi'an Hi-tech Development Zone, XI'AN, SHAANXI, CHINA, 710075

## Conformance criteria and evaluation

The System Sensor, Model 2151BPI, nom. sens. (S)=7.0% obs./m, photoelectric smoke detector has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 1603.2-1997, 'Automatic fire detection and alarm systems - Point type smoke detectors' incl. Amdt 1 (August 1998).

## 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.

- i. Compatibility of this fire detector and its base assembly with new or existing control and 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



# Schedule to Certificate of Conformity

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## Producer's description

The System Sensor, Model 2151BPI, nom. sens. (S)=7.0% obs./m, photoelectric smoke detector uses an infra-red light emitter and detector pair to detect smoke. Normally none of the infra-red light from the emitter reaches the detector. Upon smoke particles entering the chamber, the infra-red light is scattered by the particles and this is sensed by the detector. When a certain amount of light reaches the detector, the electronic circuit triggers and the alarm state is entered. The detector is reset from alarm state into the sense state by a momentary power interruption. In quiescent state, the LEDs flash every ten (10) seconds indicating power is applied and the detector is operating. In alarm the detector has a latching feature causing the LEDs to illuminate continuously. Other features of the detector include remote LED capability and internal magnetic reed switch for test purposes.

The System Sensor, Model 2151BPI, nom. sens. (S)=7.0% obs./m, photoelectric smoke detector is 104mm diameter and 51mm high (when installed in the System Sensor model B401 mounting base).

## Technical specification

The following details are a representative extract of the technical specification for the System Sensor, Model 2151BPI, nom. sens. (S)=7.0% obs./m, photoelectric smoke detector and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

### Electrical

Voltage range:	8.5 to 35 Vdc
Standby current:	120 $\mu$ A start-up. 60 $\mu$ A quiescent.
Alarm current:	10 mA to 130 mA

### Functional

Nominal sensitivity:	(S)=7.0% obs./m
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### Environmental

Operating temperature range:	0°C to 49°C
Operating humidity range:	1 % to 93% Relative Humidity non-condensing

### Physical

Height	51mm (with B401 base)
Diameter	104 mm