



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 1710	21-Feb-2005	Number 16	Issue date 1-May-2020	30-Apr-2021

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Product designation

System Sensor, Model 2251BAUS, nom. sens. (S)=2% to 8% 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

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

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 2251BAUS, nom. sens. (S)=2% to 8% 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. Use with the Firetronix (Pertronic), Model F100A, control and indicating equipment with the CIE detector sensitivity settings at either level 1 or level 3.
- ii. 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

David Whittaker
Executive Officer – ActivFire Scheme



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Producer's description

The System Sensor, Model 2251BAUS, nom. sens. (S)=2% to 8% obs./m, photoelectric smoke detector is a plug-in type smoke detector that combines a photoelectric sensing chamber with addressable analogue communications. The detector transmits an analogue representation of smoke density over a communication line to the control and indicating equipment. The sensitivity of the detector is set at the Notifier, Firetronix (Pertronic), Model F100A control and indicating equipment by selecting the sensitivity field levels 1 or 3. Two rotary decade switches are provided for setting the detector's address.

Two LEDs on the detector are controlled by the control and indicating equipment to indicate the detector status. The operational modes are RED blink, RED continuous and off.

This detector requires a compatible communications protocol.

Technical specification

The following details are a representative extract of the technical specification for the System Sensor, Model 2251BAUS, nom. sens. (S)=2% to 8% 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.

Sensitivity:

Smoke sensor	2% obs./m	Firetronix (Pertronic), Model F100A, Sensitivity Setting Level 1
	8% obs./m	Firetronix (Pertronic), Model F100A, Sensitivity Setting Level 3

Operating voltage range:

15 Vdc to 32 Vdc

Standby current:

300 µA @ 24 Vdc (one communication blink every 5 seconds with LED blink enabled)

Maximum alarm current (LED on):

6.5 mA @ 24 Vdc

Operating temperature range:

0°C to 49°C

Operating humidity range:

10% to 93% RH (noncondensing)

Height:

51 mm

Diameter:

104 mm

Tested base designation	Base + detector circuit type
System Sensor, Model B501	Analogue Addressable