



# Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
<b>afp - 2753</b>	9-Mar-2012	Number 8	Issue date 27-Mar-2018	30-Apr-2018
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## Product designation

**Hochiki, Model ALK-ASN, photoelectric smoke sensor**

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

## Agent/distributor

Hochiki Australia Pty Ltd  
391 Park Road, REGENTS PARK, NSW, AUSTRALIA, 2143

## Registrant

Hochiki Australia Pty Ltd  
391 Park Road, REGENTS PARK, NSW, AUSTRALIA, 2143

## Producer

Hochiki Corporation  
10 - 43, Kamiosaki 2-Chome, SHINAGAWA-KU, TOKYO, JAPAN, 141

## Conformance criteria and evaluation

The Hochiki, Model ALK-ASN, photoelectric smoke sensor has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 7240.7-2004, 'Fire detection and alarm systems - Point-type smoke detectors using scattered light, transmitted light or ionization (ISO 7240-7:2003, MOD)'

## 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. This equipment is specified by the Producer for connection and use only with Fire detection control and indicating equipment (FDCIE) produced and designated as follows.
  - Kentec Electronics Ltd: Taktis, Syncro AS
- ii. This device is not designed for outdoor use.

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 Hochiki, Model ALK-ASN, photoelectric smoke sensor uses a photoelectric chamber to detect the presence of smoke. The smoke detector has two light emitting diodes (LED) mounted on the printed circuit board within the housing, which remains static normal operation and indicates steady red when the smoke detector is in the alarm condition. Electrical connection to the smoke detector is achieved through the Hochiki bases assembly.

The Hochiki, Model ALK-ASN, photoelectric smoke sensor is 100 mm diameter and has a height of approximately 45 mm when connected to the mounting base assembly.

## Technical specification

The following details are a representative extract of the technical specification for the Hochiki, Model ALK-ASN, photoelectric smoke sensor and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

### Schedule of properties/characteristics

The following schedule is an extract of physical and operational properties/characteristics of the certified/listed equipment.

Operating voltage	V <sub>high</sub> = 39.5 Vdc ± 3%
	V <sub>low</sub> = 31 Vdc ± 3%
	(The margin of voltage between V <sub>low</sub> and V <sub>high</sub> is strictly required with the range of 7V ~ 9V.)
Output data current range	I <sub>low</sub> = 0 to 9 mA
	I <sub>high</sub> = 22 mA ± 20%
Current Consumption	Maximum 800 µA (when not called)
	Low Power Mode: Maximum 200 µA (at 0.75 sec)
	2 mA (when called)
Alarm indicator LED current	8.0 mA (Typical)
Remote LED current	8.5 mA (Typical)
Operating smoke density range	0 to 5.5 %/m
Fire test equivalent density	4.5 %/m (smoldering filter paper)
Operating temperature range	-10° C to 50° C (this device is not designed for outdoor use.)
Storage temperature range	-20° C to 60° C (under humidity 80%)
Maximum humidity	95 %RH

### Schedule of components and/or assemblies

The following is a schedule of validated components and/or assemblies of the certified/listed equipment.

Verified base designation	Description	Base + detector circuit type
Hochiki, Model YBN-R/3	Standard base	Analogue Addressable
Hochiki, Model YBN-R/3 and Hochiki, Model YBN-UA (WHT)	Recessed base assembly When mounted with the Hochiki, Model YBN-R/3 base and Model YBN-UA (WHT) recess assembly, the sensing chamber of the Hochiki, Model ALK-ASN, shall be centered at a position 15 mm below the underside surface of the ceiling. Ref.: CSIRO Fire Systems Laboratory report XF3047/R1 and AS 1670.1:2015, Cl. 5.1.1	
Hochiki, Model YBN-R/2NA	Standard base	
Hochiki, Model YBO-R/SCI	Positive switching short circuit isolator base	
Hochiki, Model YBO-R/BSB	Sounder base with beacon	

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## Supplementary information

### Schedule of relevant articles

The following schedule is an extract of articles significant and/or related as evidence of conformity.

Reference		Title / description	Date issued (or date validated)	Source
Ident. type	Ident.			
Report Number	XF2730/R2	Conformity Evaluation of the Hochiki Model ALK-ASN Smoke Detector to the requirements of AS 7240.7-2004	27-Feb-2012	CSIRO, Industrial Research Services, AU
Report	XF3047/R1	Evaluation for Conformity of the Hochiki, Model ALK-ASN photoelectric smoke sensor, Model YBN-R/3 detector base and Model YBN-UA(WHT) recess base adapter to the requirements of AS 7240.7-2004	1-Mar-2017	CSIRO, Fire Systems Laboratory, AU
Specification	ALK-ASN Specification(HAU)v2	Hochiki Analogue Photoelectric Smoke Sensor ALK-ASN (ALK-ASN Specification(HAU)v2 19032018.pdf)	19-Mar-2018	Hochiki Australia Pty Ltd, AU
Installation Instructions	7-0-000-2536-722	Installation Instructions for Hochiki Analogue Smoke Sensors Type : ALK	Jan-2012	Hochiki Corporation, JP