



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 3859	24-Nov-2023	Number 4	Issue date 22-Apr-2026	30-Apr-2027

Product designation

Emerald Alarms, Model EP-HYB-240-10B, 230 Vac powered, fixed (non-replaceable) battery backup, silencing/hush facility, interconnectable, photoelectric smoke alarm

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

Agent/distributor

Emerald Alarms Pty Ltd
20 Kikuyu Road, CHEVALLUM, QLD, AUSTRALIA, 4555

Conformance criteria and evaluation

The Emerald Alarms, Model EP-HYB-240-10B, 230 Vac powered, fixed (non-replaceable) battery backup, silencing/hush facility, interconnectable, photoelectric smoke alarm has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 3786:2014, 'Smoke alarms using scattered light, transmitted light or ionization' incl. Amdt 1 (27 August 2015) / Amdt 2 (30 October 2018).

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.

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



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Producer's description

The Emerald Alarms, Model EP-HYB-240-10B, 230 Vac powered, fixed (non-replaceable) battery backup, silencing/hush facility, interconnectable, photoelectric smoke alarm is an externally energized photoelectric smoke alarm. The smoke alarm main power supply is an external 230 Vac supply. The smoke alarm includes a standby power supply from a 3 Vdc battery which is not user replaceable.

An electric buzzer/horn provides an audible alarm signal when the smoke alarm senses smoke which exceeds a predetermined level. When the smoke level drops below the alarm level, the buzzer/horn is de-energised.

A self-test facility is provided by means of a button. If the button is depressed an alarm signal is emitted.

This equipment also incorporates a 'hush button'. According to the manufacturer's instructions, pressing the hush button reduces the smoke sensitivity of the smoke alarm. The sensitivity is reduced for approximately 9 minutes, at which time the smoke alarm automatically returns to normal operation.

The Emerald Alarms, Model EP-HYB-240-10B, 230 Vac powered, fixed (non-replaceable) battery backup, silencing/hush facility, interconnectable, photoelectric smoke alarm can be interconnected with other alarms, using hard wired and/or an optional wireless radio frequency communication. When interconnected, one smoke alarm entering the alarm state will result in all interconnected devices operate their piezo sounders. The maximum number of hard-wired interconnected alarms is twenty-four and wireless interconnection is forty.

This Emerald Alarms, Model EP-HYB-240-10B is black in colour and circular in shape. It is approximately 140 mm diameter with a height of 44 mm.

Technical specification

The following details are a representative extract of the technical specification for the Emerald Alarms, Model EP-HYB-240-10B, 230 Vac powered, fixed (non-replaceable) battery backup, silencing/hush facility, interconnectable (wired or wireless option), photoelectric smoke alarm and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Schedule of variant designations

The following is a schedule of validated variant designations of the certified/listed equipment.

Type	Variant		Description
	Ident.		
Model	EP-HYB-240-10B		Black coloured interconnectable photoelectric smoke alarm with optional radio frequency module for wireless interconnection.

Schedule of properties/characteristics

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

Smoke sensing type:	Photoelectric (Type A)
Main power source:	230 Vac 50 Hz 80 mA
Standby power:	Built-in 3 Vdc Lithium battery (Battery not user replaceable)
Battery list:	Pairdeer CR17450G or EVE CR17450
Software version:	Version 1.1
Interconnectivity:	Wireless: up to 40 detectors Wired: up to 24 detectors
Operating temperature range:	0 °C to 40 °C
Operating humidity range:	0% to 93% RH
Alarm sound level:	85 dB at 3 metres minimum
Alarm condition:	Audible signal pattern (ISO 8201)
Silencing function:	Yes
Dimensions:	Ø140 mm × 44 mm (h)
Fixing method:	Screw fixing
Mounting method:	Ceiling and wall

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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.			
Letter	CSBA0118 Zhejiang 240619-01	Verification and Validation of Packaging, Labelling and Manual Updates for Emerald Alarm Models	20-Jun-2024	CSIRO, Fire Systems Laboratory, AU
Report	XF3633/R1	Evaluation for Conformity of the Emerald Alarms Model EP-HYB-240-RF-10B Photoelectric Smoke Alarm to the requirements of AS 3786:2014 +A1 +A2	17-Nov-2023	CSIRO, Fire Systems Laboratory, AU
Document	EP-HYB-240-10B User Manual_2023.07 _PRINT.pdf	Emerald alarms SMOKE ALARM USER MANUAL MODEL NUMBER: EP-HYB-240-10B 2023.07 (EP-HYB-240-10B User Manual_2023.07_PRINT.pdf)	27-Sep-2023	Emerald Alarms Pty Ltd, NSW, AU