Certificate of Conformity

Certificate num.	Registration date	Version		Valid until	Page **1** of **2**
		Number	Issue date		
afp - 3830	2-Aug-2023	1	7-Aug-2023	30-Apr-2025	

Product designation

F-Guard, Model F-Guard IR3-HD, Class 1, Triple IR Flame Detector

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

Agent/distributor

GasTech Australia Pty Ltd
24 Baretta Road, WANGARA, WA, AUSTRALIA, 6065

Registrant

GasTech Australia Pty Ltd
24 Baretta Road, WANGARA, WA, AUSTRALIA, 6065

Producer

Fire & Gas Detection Technologies, Inc
4222 E. La Palma Ave, ANAHEIM, CA, UNITED STATES, 92087

Conformance criteria and evaluation

The F-Guard, Model F-Guard IR3-HD, Class 1, Triple IR Flame Detector has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS ISO 7240.10:2018, 'Part 10: Fire detection and alarm systems - Part 10: Point-type flame detectors'.

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 these detectors with new or existing control and indicating equipment should be verified prior to installation.

Producer's description

The F-Guard, Model F-Guard IR3-HD, Class 1, Triple IR Flame Detector provides ultra-fast response, high performance and reliable detection of all types of hydrocarbon fires (visible and non-visible). The detector addresses slow growing fires as well as fast eruption of fire using triple IR (IR3) technology. It operates in all weather and light conditions with immunity to false alarms. The detector provides high-definition video output with clear imaging of fire event at up to 100 ft. (30 m), allowing rescuers to know the exact situation before entering the hazardous area. It will automatically record a video of a fire event (1 min pre-alarm/ up to 3 min post-alarm).

Issued by

Kai Loh
Executive Officer – ActivFire Scheme

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.

Schedule to
Certificate of Conformity

Technical specification

The following details are a representative extract of the technical specification for the F-Guard, Model F-Guard IR3-HD, Class 1, Triple IR Flame Detector 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.

Variant		
Type	**Ident.**	**Description**
Model num.	FG1-IR3HD-AS11	Triple IR radiation class 1 flame detector with high-definition video-output

Schedule of properties/characteristics

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

Item	Specifications
Classification	Class 1
Detection Time and Distance	40ms for fast fire burst or explosion 2.6 s for 1 ft² (0.1 m²) pan fire at 0 - 100 ft. (0 – 30 m) 3.7 s for 1 ft² (0.1 m²) pan fire at 100 - 230 ft. (30 – 70 m)
Field of view	90° Horizontal, 75° Vertical
Time Delay	0-30 seconds
Built-in Test	Automatic and Manual
HD Video	Allows clear imaging of fire and people at 100 ft. (30 m) distance
Video Recording of Alarm Events	1 minute per-event and 3 minutes post-event
System Integration Protocol	ONVIF (Open Network Video Interface Forum)
Operating Voltage	24 Vdc nominal (18-32 Vdc)
Current Consumption	Standby
Electrical Entries	2 × conduit entries 3/4" 14 NPT or M25 × 1.5
Wiring	12-20AWG (2.5 - 0.35 mm²)
Relays	Volt-free contacts rated 2A at 30 Vdc Alarm – normally open and normally closed Fault – normally closed
Indication	Tri-colour LED
Modbus	RTU compatible on RS-485
Mechanical Specs	7.87 × 5.12 × 5.12 (200 × 130 × 130 mm)
Temperature Range	Operating
Humidity	Up to 99% (RH), non-condensing
Ingress Progression	IP66 & 68; NEMA 250 4X & 6P

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.**			**Source**
Report number	CSBA0026/R1	Evaluation for Conformity of the F-Guard, FG1-IR3 Series Triple IR radiation flame detectors to the requirements of AS ISO 7240.10:2018	2-Aug-2023	CSIRO Fire Systems Laboratory, AU
Datasheet	F-Guard IR3-HD Datasheet.pdf	F-Guard IR3-HD Triple IR Flame Detector Gastech (F-Guard IR3-HD Datasheet.pdf)	21-Jun-2019	Gastech Australia Pty Ltd, WA, AU
Manual	F101V0020.06	F-Guard IR3-HD Triple IR Flame Detector User Manual Gastech (F-Guard IR3-HD Manual F101V0020.06.pdf)	25-Feb-2022	