

# Fireray 3000 Ex d End-to-End Explosive Proof Beam Smoke Detector [ATEX] 3000-115

The Fireray 3000 Ex d is ideally suited for the protection of large areas, with potentially explosive atmospheres, against smoking fires. Fireray 3000 Ex d comprises an infra-red transmitter and a receiver, both of which are ATEX-certified for use in Group 2 hazardous areas. There is a separate, safe area, wall-mounted remote/low level control unit to allow adjustment and testing from a convenient non-hazardous location.

The product is designed for large enclosures within oil rigs, refineries, ordnance stores and similar premises. It provides an early warning of smouldering or strongly smoke-generative fires, which may not be picked up by flame detectors installed in many hazardous areas.



## FEATURES

- Range 10 to 80 m (33 to 262 ft) configurable per set of Detectors
- Light Cancellation Technology™
- Integral laser alignment in Receiver
- 2-wire interface between Controller and Receiver
- Allows for 2 Detectors per System Controller
- Separate fire and fault relays per Detector
- Remote/low level Controller with LCD display (safe area)
- Programmable sensitivity and fire/fault delay
- Contamination compensation for dust and building movement
- Separate Transmitter and Receiver unit certified to Ex d
- Multiple cable gland knockouts for ease of wiring
- Transmitter can be powered from Controller
- Complies with ATEX and EN54-12

## APPROVALS

World-wide approvals include EN54-12 and ATEX. Visit our website for up-to-date approvals information.

## ACCESSORIES

1000-019 Protective Wire Cage

## Operation

The Fireray 3000 Ex d comprises a modern Transmitter head that emits an infrared beam to an associated Receiver, plus a compact Low-Level Controller. When smoke crosses the IR beam and signal strength drops below a preset threshold, an alarm is triggered.

Both Transmitter and Receiver heads feature integrated thumbwheels for precise alignment, with 10 degrees of adjustment in both planes. For greater flexibility, an Adjustment Bracket offers up to 180 degrees of movement and 360-degree rotation.

The Fireray 3000 Ex d's laser-assisted alignment, accessible from the Controller or Receiver, simplifies installation by a single operator. The Controller can power the Transmitter directly, reducing power supplies, and its LCD interface provides user-friendly commissioning, testing, and maintenance options, including fire sensitivity and time settings.

The system complies with RoHS and WEEE requirements.

SCAN THE QR CODE  
TO EXPLORE THE  
FIRERAY PRODUCT RANGE



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### TECHNICAL SPECIFICATION

Operating range	10 to 80 m (33 to 262 ft)
Operating voltage range	12 to 36V DC $\pm 10\%$
Operating controller current (with 1 or 2 Receivers)	14mA (constant)
Operating transmitter current	8mA (per Transmitter)
Power down reset time	>20 seconds
Fire and fault relay contacts	VFCO 2A @ 30 volts DC resistive
Operating temp. (non-condensing) as per EN54-12:2015	-10°C to +55°C (+14°F to +131°F)
Operating temp. (non-condensing) - ATEX	-20°C to +55°C (-4°F to +131°F)
Optical wavelength	850nm
LED indications:	
Control Unit	Red = Fire; Amber = Fault; Green = System OK
Receiver	Alignment LEDs for single person alignment
IP rating	IP54 (Controller) IP66 (Transmitter/Receiver)
Relative humidity (non-condensing)	93%
Parts list (System) Product code: 3000-115	1x Transmitter (clear lens) 1x Receiver (dark lens) 1x Control Unit 1x Fixing Kit 2x Brackets
Parts list (Additional Detector) Product code: 3000-026	1x Transmitter (clear lens) 1x Receiver (dark lens) 1x Fixing Kit 2x Brackets
Housing material:	
Controller	UL94 V2 PC
Transmitter/Receiver	Copper free aluminium alloy LM25
Bracket	Steel
Housing colour:	
Controller	White RAL 9016
Transmitter/Receiver	Red
Bracket	Red
Cable gland entries	3 x 20mm (3 x 3/4")
Peppers E3WBF Ex d cable gland	E - Type of gland featuring armour specific clamping 3 - Silicone W - SWA B - Brass F - Multiple certification
CPR reference	0786-CPR-21669

All figures are quoted for 25°C

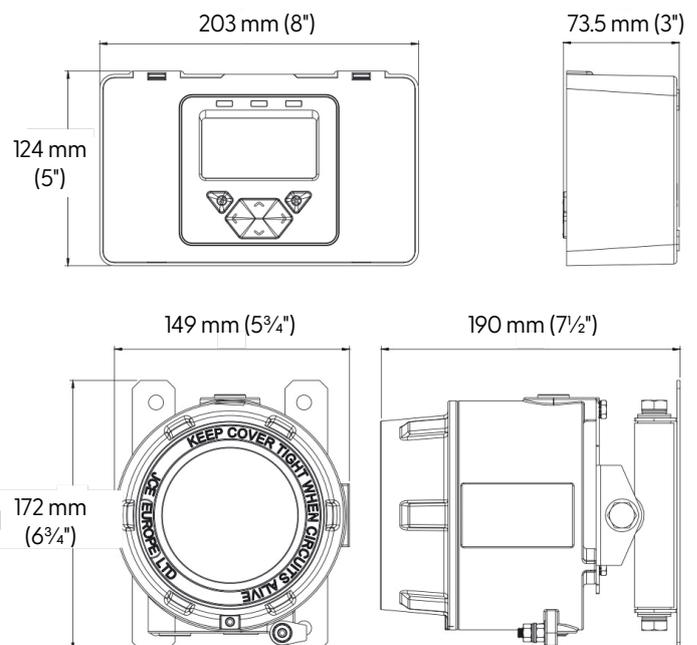
### ALARM & OPERATION THRESHOLDS

	Min	Type	Max
Delay to alarm/fault (selectable in 1 sec steps)*	2 s	10 s	30 s
Laser time-out (selectable in 1 min steps)	1 min	5 min	59 min
Response sensitivity/threshold (selectable in 1% steps)*	25%	35%	60%

\* Complies with EN54-12:2015 for a sensitivity level of 25%, with a maximum delay to fire of 20 seconds.

### WEIGHT & DIMENSIONS

Control Unit	606 g (1¼ lb)
Transmitter (inc. Brackets)	3.7 kg (8¼ lb)
Receiver (inc. Brackets)	3.7 kg (8¼ lb)



### INSTALLATION RECOMMENDATIONS

Please refer to the User Guide (UG) for mounting, wiring and commissioning instructions. The installation of the Fireray 3000 Ex d End-to-End Explosive Proof Beam Smoke Detector should be undertaken in accordance with the recognised national, or international, standards and Codes of Practice (COP).