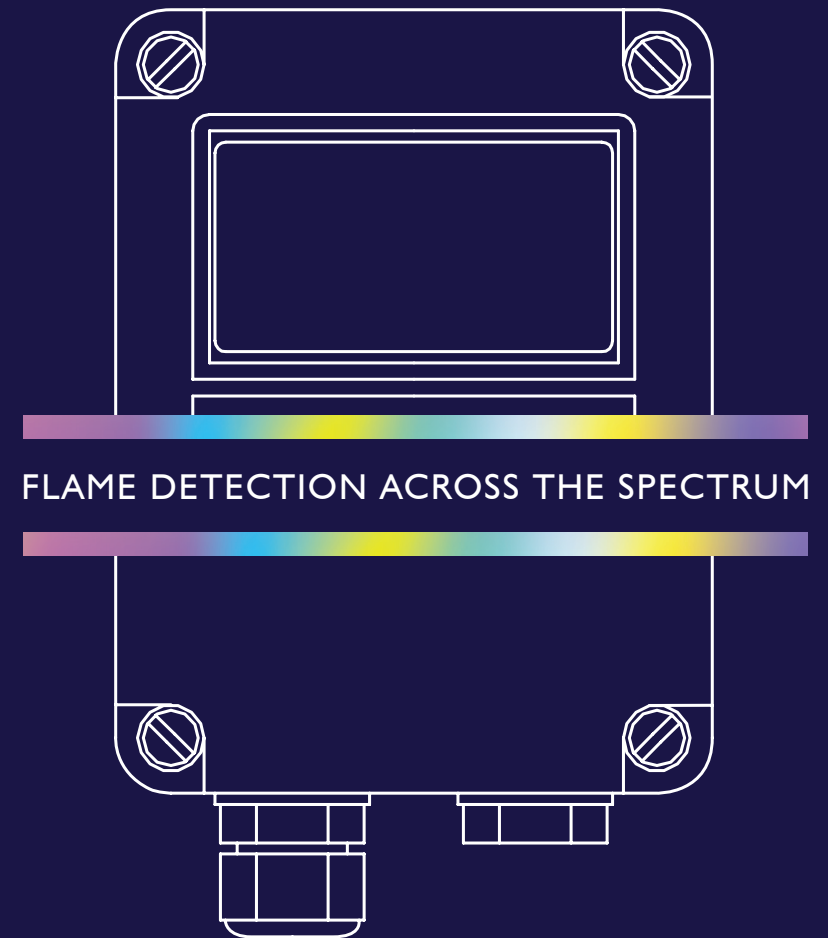


Rapid flame  
detection for  
high value  
industries



FFE Ltd. A global innovator in the design and  
manufacture of world class fire detection solutions.

FFEUK.COM





TALENTUM®  
PROVIDES FLAME  
DETECTION WHERE  
YOU NEED IT MOST

TALENTUM®  
WE STRIVE FOR  
EXCELLENCE IN  
EVERYTHING  
WE DO

FFE is a global innovator in the design and manufacture of world class fire detection solutions. Trusted by installers, distributors and organisations for over 40 years, our Talentum®, Fireray®, Aviation Fire Extinguishers and Vibration Switches help to protect high value buildings and assets. Our commitment to fire detection and prevention led to the development of the world's most trusted smoke detection beam, Fireray® the favoured choice of many of the world's leading smoke detection distributors and installers. Our Talentum® range was developed to provide early detection for industries where fast flame detection is critical.

Our solutions are designed and manufactured in the UK and our customers are fully supported by our team of fire protection experts. We provide consultancy, training and full technical support, so that you always have peace of mind in knowing that your assets are given the best possible protection from fire.

CONTENT

03 About FFE  
04 Why use Talentum®?

05 Talentum® range  
of flame detectors

08 Talentum® accessories  
10 Technical Specifications

14 Worldwide protection



# TALENTUM® WHY USE OUR FLAME DETECTORS

Specifying and installing fire protection technology carries significant levels of responsibility. With so many variable risks in so many different industries, it's critical that the chosen technology will offer the very best protection in any given circumstance.

History has taught us that early fire detection is by far the best way to minimise the spread of fire. Identifying a spark, before it produces smoke or becomes an actual fire, can help to minimise the risk of fire damage. Talentum® is a high speed infrared device for

flame detection designed specifically to detect a spark, or a characteristic flicker of a flame, faster and more accurately than a smoke or heat detector, even where dust, steam or smoke are commonplace, Talentum® provides unmatched fire protection for high value industries.

If fast, accurate fire detection is critical, choose Talentum®, because when it comes to fire detection, only the best will do.



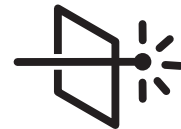
IMMUNE TO FILMS OF  
OIL, WATER, ICE, DUST

Maintains detection  
capabilities in harsh  
environments



INGRESSION  
PROOF

Protection against the  
ingress of dust, solid objects  
and moisture into an  
enclosure making Talentum®  
suitable for the most extreme  
wet and dry conditions



DETECTS  
THROUGH GLASS

Increased capabilities  
with Talentum looking  
into secure or  
hazardous areas



HIGH RESISTANCE  
TO FALSE ALARMS

Talentum® looks for  
the typical flickering  
movement of a flame  
before triggering  
an alarm

‘Precision flame detection  
through the spectrum’

## HOW DOES TALENTUM® WORK

The Talentum® infrared (IR) optical sensing technology can detect flames from almost all fuel types, from Hydrocarbon through to invisible fires such as hydrogen. By looking for characteristic flicker and energy, Talentum® is able to detect a flame through dust, steam, smoke and even glass, or detect flickering, low frequency IR and UV radiation that is emitted by flames during combustion, while discounting false signals induced by wind, draughts and sunlight.

## BENEFITS

Can detect a flicker in as little  
as 27 milliseconds (condition-dependant)

Use in outdoor or indoor applications

Internal self-test capability gives the  
high immunity to false-flame sources

Detects flames through dust, steam,  
smoke and even glass.

Flame-proof or explosion-proof  
and intrinsically safe high ambient  
temperature options

Universal flame detection for all  
high risk, high value applications

Detects invisible flames from fuels such  
as hydrogen and other inorganic fuels

Immune to the effects of wind,  
draughts and sunlight





## Talentum® Dual IR (IR<sup>2</sup>) Flame Detectors

These highly sensitive flame detectors can accurately detect low frequency IR radiation (1 to 15Hz) that is emitted by flames during combustion. Using two IR sensors, the IR2 responds to different IR wavelengths, discriminating between flames and other radiation sources.

Offering a maximum ambient operating temperature of 55°C (FM: +60°C/140°F), Dual IR2 offers users a choice of alarm currents, response times, latching or non-latching outputs and sensitivity. They also have internal self-test sources that check the detectors operation when used remotely.

### KEY FEATURES

- High immunity to false sources
- Ideal for applications with visible light present
- Detects invisible flames from fuels such as Hydrogen and other inorganic fuels
- Selectable operating responses
- Remote self-testing
- Low power consumption
- Approved to EN54 - 10:2002

### IDEAL APPLICATIONS

- Aircraft Hangars
- Coal Handling
- Fume Cupboards
- Printing
- Spray Booths
- Textile Manufacturing
- Waste Handling



DETECTS LOW  
FREQUENCY  
RADIATION FROM  
FLAMES DURING  
COMBUSTION

## Talentum® UV/IR2 Flame Detectors

Offering the highest immunity to false alarms, the UV/IR2 is designed to accurately detect flickering, low frequency IR and UV radiation (1 to 15Hz) that is emitted by flames during combustion.

Offering a maximum ambient operating temperature of 55°C (FM: +60°C/140°F), the UV/IR2 detector has a UV sensor and two IR sensors that respond to different IR wavelengths from both the UV and the IR spectrum. False alarms from flickering sunlight, arc welding and lighting are eliminated by a combination of UV and dual IR signal processing techniques.

### KEY FEATURES

- High immunity to false sources
- Ideal for applications with visible light present
- Detects invisible flames from fuels such as Hydrogen and other inorganic fuels
- Selectable operating responses
- Remote self-testing
- Low power consumption
- Approved to EN54 - 10:2002

### IDEAL APPLICATIONS

- Aircraft Hangars
- Engine Rooms
- Engine Test Facilities
- Generators
- High Voltage Equipment
- Nuclear Industry
- Power Plants
- Storage Tanks



DETECTS LOW  
FREQUENCY IR AND  
UV RADIATION FROM  
FLAMES DURING  
COMBUSTION

## Talentum® Triple IR (IR<sup>3</sup>) Flame Detectors

With high immunity to false flame sources, both indoors or out, these highly sensitive flame detectors can accurately detect low frequency IR radiation (1 to 15Hz) that is emitted by flames during combustion, even under the most difficult conditions. Ideal for indoor or outdoor applications, the IR3 has three sensors that respond to different IR wavelengths, discriminating between flames and other sources of radiation.

Offering a maximum ambient operating temperature of 55°C (FM: +60°C/140°F), Triple IR3 offers users a choice of alarm currents, response times, latching or non-latching outputs and sensitivity. They also have internal self-test sources that check the detectors operation when used remotely.

### KEY FEATURES

- High immunity to false sources
- Ideal for applications with visible light present
- Detects invisible flames from fuels such as Hydrogen and other inorganic fuels
- Selectable operating responses
- Remote self-testing
- Low power consumption
- Approved to EN54 - 10:2002

### IDEAL APPLICATIONS

- Atria
- Coal Handling
- Pharmaceuticals
- Printing
- Spray Booths
- Nuclear Industry
- Waste reprocessing
- Storage Tanks
- Tunnels



DETECTS LOW  
FREQUENCY  
RADIATION FROM  
FLAMES DURING  
COMBUSTION

## Talentum® Single IR Spark Detectors

The Single IR rear viewing specialist flame detector is designed for machine applications to protect enclosed, dark areas where no visible light is present.

Offering extremely high sensitivity to flame and sparks, the detector has a very fast response time. The infrared (IR) sensor, which is selective to low frequency modulated infrared (IR) radiation such as that emitted from flames and sparks, is designed to reject static radiation from sunlight and artificial lighting.

### KEY FEATURES

- Operates at temperatures of up to 55°C (FM: +60°C/140°F)
- High sensitivity to embers or sparks
- Detects through layers of dust or dense material flow
- Ideal for use on conductor/extraction ducts, conveyor belts or machinery protection.
- Suitable for enclosed and dark areas
- Intrinsically safe (IS) for hazardous areas.

### IDEAL APPLICATIONS

- Conductor ducts
- Extraction ducts
- Conveyor belts
- Enclosed or protected machinery



DESIGNED TO  
REJECT STATIC  
RADIATION  
FROM SUNLIGHT  
AND ARTIFICIAL  
LIGHTING

**QUALITY** All of our Talentum® Flame Detectors are backed with a 3-year warranty. We also provide on-going technical support, from specification and throughout the lifetime of your chosen product. Our solutions undergo rigorous testing procedures and comply with all relevant safety and quality regulations.

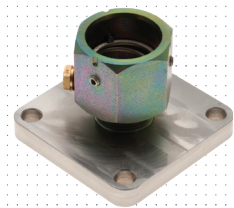




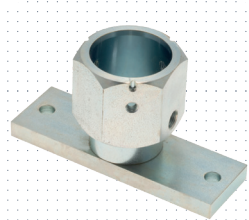
## TALENTUM® ACCESSORIES

To complement your Talentum® installation, we also offer a comprehensive range of accessories and tools for your specialist application.

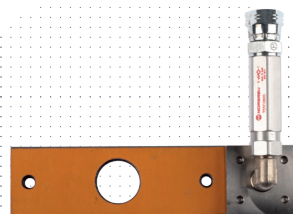
Our standard range of accessories include:



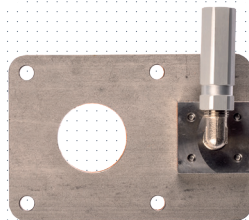
**4 Hole Mounting Flange with 1" BSP/NPT – PN: 12561**



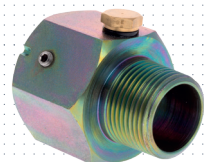
**2 Hole Mounting Flange Kit  
PN: 12564**



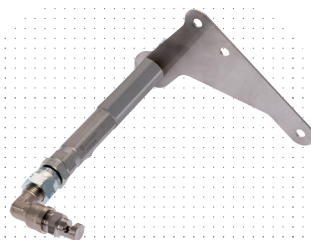
**Air Purge Adaptor  
PN: 12543**



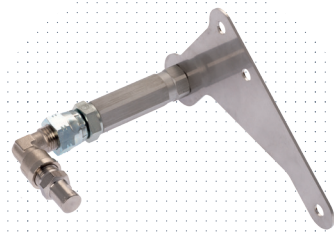
**Air Purge Adaptor  
PN: 12554**



**Bayonet Mount  
PN: 12290**



**Air Purge for Exd Housings  
PN: 12555**



**Air Purge for Standard Housings  
PN: 12556**



**Adjustable Mounting Bracket  
PN: 07127**



**Stainless Steel Weather Shield for Exd Housings  
PN: 07279**



**Stainless Steel Weather Shield for Alloy Housings  
PN: 12545**

**'TO PROTECT,  
CLEAN AND  
SECURE'**

## Talentum® Flame Detector Tester

This test unit has been designed to generate a wide range of optical output signals. Flame sensors for fire detection and flame monitoring applications can be activated and tested.

Most optical flame sensors respond to Ultra Violet (UV) and or InfraRed (IR) radiation emitted from flames during combustion. Many sensors also use flame flicker techniques to distinguish between flames and other optical false sources.

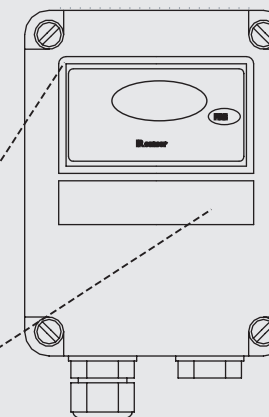
The test unit simulates the flickering flame signal by modulating the output of a filament lamp. The thermal time constant of a filament lamp prevents the generation of a perfect flame flicker signal. The slow response of the filament lamp will mean that some flame sensors may require more time to activate under test than they would with a real flame.

The unit is intended for service engineers to use, when performing commissioning and routine maintenance in safe areas only.

### KEY FEATURES










- Wide Spectral Output - UV, Visible, Near IR, Mid-IR
- Suitable to test all Talentum flame detectors
- Portable with Rechargeable NiCd Battery Pack and Charger
- Selectable Optical Output Type
- Constant Illumination
- Regular Flashing Sources (Range of Frequencies)
- Irregular Flickering Sources (Resembling Flames)
- Selectable Optical Output Intensity with LED Bar Graph Indication
- Range typically 3 metres and beyond
- 30 Second Timeout on Each Test
- Auxiliary 24Vdc Supply for Testing

**Flame Detector Tester  
PN: 16091**













Talentum®  
Dual IR  
(IR<sup>2</sup>)  
Flame  
Detectors















					
	IR2 Flame Detector	IR2 Flame Detector - Intrinsically safe (IS)	IR2 Flame Detector - Flameproof (Exd)	IR2 Flame Detector - Stainless steel	IR2 Flame Detector - Stainless steel flameproof (Exd)
	1658I	1657I	1651I	1650I	1654I
MECHANICAL SPECIFICATION					
Housing material	Die Cast Zinc Alloy	Die Cast Zinc Alloy	Copper Free Aluminium Alloy	316 Stainless Steel	316 Stainless Steel
Dimensions	142(H) x 108(W) x 82(D) mm	142(H) x 108(W) x 82(D) mm	150(H) x 146(W) x 137(D) mm	142(H) x 108(W) x 82(D) mm	150 (H) x 146 (W) x 137 (D) mm
Weight	2kg	2kg	2.5kg	2.1kg	6kg
Cable Gland Entries	2 x 20mm	2 x 20mm	3 x 20mm	2 x 20mm	3 x 20mm
Wiring	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>
ELECTRICAL SPECIFICATION					
Supply Voltage	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc
Quiescent Current	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)
Alarm Current	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)
Relay Outputs - Programmable	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching
Rating: Current Voltage Power	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)
ENVIRONMENTAL SPECIFICATION					
Operating Temperature	-10°C to +55°C	-10°C to +55°C	-10°C to +55°C	-10°C to +55°C	-10°C to +55°C
Storage Temperature	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C
Relative Humidity	95% Non condensing	95% Non condensing	95% Non condensing	95% Non condensing	95% Non condensing
IP Rating	IP66	IP66	IP66	IP66	IP66
PERFORMANCE					
Range - Class 1 / Class 3	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)
Field of View	90° min. Cone	90° min. Cone	90° min. Cone	90° min. Cone	90° min. Cone
Operating Wavelength Band	IR - 1.0 - 2.7µm	IR - 1.0 - 2.7µm	IR - 1.0 - 2.7µm	IR - 1.0 - 2.7µm	IR - 1.0 - 2.7µm
APPROVALS					
See colour key, p.13					

Talentum®  
UV/IR2  
Flame  
Detectors



						
	UV/IR2 Flame Detector	UV/IR2 Flame Detector - Extended Temperature	UV/IR2 Flame Detector - Flameproof (Exd)	UV/IR2 Flame Detector - Flameproof (Exd), Extended Temperatures	UV/IR2 Flame Detector - Stainless Steel	UV/IR2 Flame Detector - Stainless Steel, Flameproof (Exd)
	1659I	1629I	1652I	1622I	1653I	1656I
MECHANICAL SPECIFICATION						
Housing material	Die Cast Zinc Alloy	Die Cast Zinc Alloy	Copper Free Aluminium Alloy	Copper Free Aluminium Alloy	316 Stainless Steel	316 Stainless Steel
Dimensions	142(H) x 108(W) x 82(D) mm	142(H) x 108(W) x 82(D) mm	150(H) x 146(W) x 137(D) mm	150(H) x 146(W) x 137(D) mm	142(H) x 108(W) x 82(D) mm	150(H) x 146(W) x 137(D) mm
Weight	2kg	2kg	2.5kg	2.5kg	2.1kg	6kg
Cable Gland Entries	2 x 20mm	2 x 20mm	3 x 20mm	3 x 20mm	2 x 20mm	3 x 20mm
Wiring	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>
ELECTRICAL SPECIFICATION						
Supply Voltage	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc
Quiescent Current	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)
Alarm Current	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)
Relay Outputs - Programmable	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching
Rating: Current Voltage Power	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)
ENVIRONMENTAL SPECIFICATION						
Operating Temperature	-10°C to +55°C (FM: -20°C to 60°C / -4°F to +140°F)	-20°C to +55°C	-10°C to +55°C	-20°C to +55°C	-10°C to +55°C	-10°C to +55°C
Storage Temperature	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C
Relative Humidity	95% Non condensing	95% Non condensing	95% Non condensing	95% Non condensing	95% Non condensing	95% Non condensing
IP Rating	IP66	IP66	IP66	IP66	IP66	IP66
PERFORMANCE						
Range - Class 1/ Class 3	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)
Field of View	90° min. Cone	90° min. Cone	90° min. Cone	90° min. Cone	90° min. Cone	90° min. Cone
Operating Wavelength	UV - 185 - 260nm IR - 1.0 - 2.7µm	UV - 185 - 260nm IR - 1.0 - 2.7µm	UV - 185 - 260nm IR - 1.0 - 2.7µm	UV - 185 - 260nm IR - 1.0 - 2.7µm	UV - 185 - 260nm IR - 1.0 - 2.7µm	UV - 185 - 260nm IR - 1.0 - 2.7µm
APPROVALS						
See colour key, p.13						



Talentum®  
Triple IR  
(IR<sup>3</sup>)  
Flame  
Detectors

							
	IR3 Flame Detector	IR3 Flame Detector - Intrinsically safe (IS)	IR3 Flame Detector - Extended Temperature	IR3 Flame Detector - Flameproof (Exd)	IR3 Flame Detector - Flameproof (Exd), Extended Temperature	IR3 Flame Detector - Stainless Steel	IR3 Flame Detector - Stainless steel flameproof (Exd)
	I 6589	I 6579	I 6289	I 6519	I 6219	I 6509	I 6549
MECHANICAL SPECIFICATION							
Housing material	Die Cast Zinc Alloy	Die Cast Zinc Alloy	Die Cast Zinc Alloy	Copper Free Aluminium Alloy	Copper Free Aluminium Alloy	316 Stainless Steel	316 Stainless Steel
Dimensions	142(H) x 108(W) x 82(D) mm	142(H) x 108(W) x 82(D) mm	142(H) x 108(W) x 82(D) mm	150(H) x 146(W) x 137(D) mm	150(H) x 146(W) x 137(D) mm	142(H) x 108(W) x 82(D) mm	150(H) x 146(W) x 137(D) mm
Weight	2kg	2kg	2kg	2.5kg	2.5kg	2.1kg	6kg
Cable Gland Entries	2 x 20mm	2 x 20mm	2 x 20mm	3 x 20mm	3 x 20mm	2 x 20mm	3 x 20mm
Wiring	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>
ELECTRICAL SPECIFICATION							
Supply Voltage	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc	14 to 30Vdc
Quiescent Current	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)
Alarm Current	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)
Relay Outputs Program-mable	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching
Rating: Current Voltage Power	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)	1.0A Max. 50Vdc Max. 30W Max. (Note: Resistive Loads Only)
ENVIRONMENTAL SPECIFICATION							
Operating Temperature	-10°C to +55°C (FM: -20°C to 60°C / -4°F to +140°F)	-10°C to +55°C	-30°C to +55°C	-10°C to + 55°C (FM: -20°C to 60°C / -4°F to +140°F)	-30°C to +55°C (FM: -20°C to 60°C / -4°F to +140°F)	-10°C to +55°C	-10°C to +55°C (FM: -20°C to +60°C / -4°F to +140°F)
Storage Temperature	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C	-20°C to + 65°C	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C
Relative Humidity	95% Non condensing	95% Non condensing	95% Non condensing	95% Non condensing	95% Non condensing	95% Non condensing	95% Non condensing
IP Rating	IP66	IP66	IP66	IP66	IP66	IP66	IP66
PERFORMANCE							
Range - Class 1/ Class 3	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)	12m/25m (Approved)
Field of View	90° min. Cone	90° min. Cone	90° min. Cone	90° min. Cone	90° min. Cone	90° min. Cone	90° min. Cone
Operating Wavelength	IR - 1.0 - 2.7µm	IR - 1.0 - 2.7µm	IR - 1.0 - 2.7µm	IR - 1.0 - 2.7µm	IR - 1.0 - 2.7µm	IR - 1.0 - 2.7µm	IR - 1.0 - 2.7µm
APPROVALS							
See colour key on p.13							
							

Talentum®  
Single IR  
Spark  
Detectors

		
	Single IR Spark Detector for Bayonet Mounting	Single IR Intrinsically Safe Spark Detector for Bayonet Mounting
	I 6580	I 6570
MECHANICAL SPECIFICATION		
Housing material	Die Cast Zinc Alloy	Die Cast Zinc Alloy
Dimensions	142(H) x 108(W) x 82(D) mm	142(H) x 108(W) x 82(D) mm
Weight	2.4kg	2.4kg
Cable Gland Entries	2 x 20mm	2 x 20mm
Wiring	1.0 to 4.0mm <sup>2</sup>	1.0 to 4.0mm <sup>2</sup>
ELECTRICAL SPECIFICATION		
Supply Voltage	14 to 30Vdc	14 to 30Vdc
Quiescent Current	3mA (min) to 8mA (max)	3mA (min) to 8mA (max)
Alarm Current	9mA (min) - 28mA (max)	9mA (min) - 28mA (max)
Relay Outputs Programmable	Normally Open or Normally Closed Latching or Non-latching	Normally Open or Normally Closed Latching or Non-latching
Rating: Current Voltage Power	0.250A Max. 30Vdc Max. 3.0W Max. (Note: Resistive Loads Only)	0.250A Max. 30Vdc Max. 3.0W Max. (Note: Resistive Loads Only)
ENVIRONMENTAL SPECIFICATION		
Operating Temperature	-10°C to +55°C	-10°C to +55°C
Storage Temperature	-20°C to +65°C	-20°C to +65°C
Relative Humidity	95% Non condensing	95% Non condensing
IP Rating	IP66	IP66
PERFORMANCE		
Operating Wavelength	IR - 1.0 to 3.0µm	IR - 1.0 to 3.0µm
APPROVALS		

APPROVALS KEY:

- AFNOR

■ BASEEFA

■ BASEEFA ATEX

■ BASEEFA IECEx

■ BAS02ATEX1001/3X

■ CCCF
- CPR

■ CSFM

■ FM

■ LPCB

■ VdS

SPECIALIST  
APPLICATIONS

As manufacturers of high speed flame detection technology, our experts can provide you with fire protection technology for any type of application. In addition to our design consultation service, we can also provide you with a complete technical design service, along with drawings to assist you with your installation.

HELP FROM FFE

As additional support, we provide comprehensive training programmes for the Talentum® range, tailored to suit your own specific requirements. We are happy to train individuals or your entire installation team.

Contact us at:  
e [technical@ffeuk.com](mailto:technical@ffeuk.com)



## PROTECTING LIVES WORLDWIDE

### ■ BURGAN CAPE TERMINALS, SOUTH AFRICA

Our IR3 Intrinsically safe Talentum® units were chosen to protect Cape town's first independent oil storage and distribution terminal which offers a storage capacity of 122,000 m³ in 12 tanks.

### ■ GLADSTONE DOCKS, LIVERPOOL, UK

With such a large presence of combustible material in one place the biomass conveyor required a fire detection system that could quickly and efficiently detect fires. The FFE Talentum® IR3 was chosen as the ideal detector for this environment due to its false alarm immunity and speed of flame detection.

### ■ HELICOPTER REPAIR FACILITY, RZESZOW POLAND

Helicopter support company Heli-One has installed FFE's Talentum® flame detectors as part of a foam extinguishing system as its helicopter repair and overhaul facility in Rzeszow.

### ■ GUARDIAN JET CENTER, ONTARIO, USA

A fixed base operation located at the Ontario Intl Airport, FFE's Talentum® units protects the 43,200 sq.ft. hangar.

### ■ MALTA INTERNATIONAL AIRPORT

With the increase in the number of aircraft landing in Malta, the demand for Jet A1 (kerosene) for jet engines use increased and three new tanks were built in order to supply and store fuel. FFE's IR3 Intrinsically safe Talentum® units have been installed to protect these assets.

### ■ SENOKO POWER STATION, SINGAPORE

Being the largest and most technically advanced power station in Singapore, finding the right flame detector was crucial to protect the electrical capacitor units. FFE's Talentum® IR3 Exd Units were installed protecting a total of 8 capacitor units.

'PROVEN  
FAST FIRE  
DETECTION'

## INSTALLATIONS

- Trow Nutrition  
Ireland
- E.ON Energy Biomass Facility  
Shropshire
- Rolls Royce Motor Cars  
Chichester
- DP World  
Southampton Docks
- Robinson Healthcare Limited  
Workshop, UK
- Cambridge International Airport
- Ruwais Refinery,  
Al Ruwais, Abu Dhabi
- DEWA  
Dubai
- Qatar Petroleum Oil Refinery  
Qatar
- The Department of Space  
Bangalore
- Yen So Pumping station Hanoi  
Vietnam
- Goodman Logistics  
Hong Kong
- Wood River Power Station  
Illinois, USA
- Pyco Cotton Seed Processing Plant  
Lubbock, TX
- Sasolburg Refinery  
South Africa



## TECHNICAL SUPPORT

FFE Ltd is proud to be able to offer a high level of Technical Support to all our customers, from distributors to end-users. We can advise with any aspect of our Fireray® Optical Beam Smoke Detectors and Talentum® Flame Detectors.

### Our Technical Support includes:

Reviewing and advising on correct installation and alignment of FFE Beam Detectors and Flame Detectors.

Troubleshooting problems during the operation of Beam and Flame Detectors after correct installation and alignment. Advising the attributes of various types of Beam and Flame Detectors to suit different applications. Explaining good installation and operation practice for Beam and Flame Detectors.

On a proactive level, Fireray® or Talentum® product training is available to any FFE customer including installers, distributors and end users and can be arranged with your FFE Sales Manager or by contacting FFE directly. Each training course is modular and the duration can be agreed according to the customer's requirements.

These personalised training courses can be targeted to all levels; Directors, Sales & Marketing or Technical, and are tailored for mixed audiences too. They include information on Technical Support as well as Troubleshooting for advanced users.

In the UK, courses are typically delivered at the FFE Headquarters in Hitchin, Herts. For other venues, including overseas, please discuss with your Sales Manager.

### Certificates



OHSAS 18001:2017 OHS 580021

RMA Request

Should you need to return a product to us, please email [warranty@ffeuk.com](mailto:warranty@ffeuk.com)



A Halma company

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