HIKFIRE

# JTG-U-HF102-UVIR4(Ex)
# Flame Detector



The flame detector utilizes dedicated four-band infrared sensor components and ultraviolet flame sensor components for flame detection. Through a built-in high-speed microprocessor and intelligent algorithms, it can quickly and effectively distinguish between real flame radiation and interference sources. This product enables early flame alarm detection and is widely used in key units with flame protection and security needs, such as hospitals, schools (laboratories, libraries, warehouses, archives), museums, Taoist temples, banks (ATM rooms, equipment rooms), safety production workshops, indoor substations, new energy facilities, petroleum and petrochemical industries (gas stations), etc.

- The detector employs dual-spectrum characteristics with advanced multi-band pyroelectric infrared sensors and high-sensitivity ultraviolet tubes. Based on time-domain, frequency, and neural network algorithms, it can accurately detect open flame combustion of substances such as hydrogen, metals, alcohol, n-heptane, and gasoline, while maintaining strong anti-false alarm capability and stable, reliable operation.
- Using a dynamic gain signal acquisition solution, accommodating flame detection at both near and far distances. For a 0.1 m2 flame pan, it achieves a detection range of over 50m and a detection angle of no more than 100 degrees.
- Posture anomaly detection supports anti-movement alarm function.
- Support a 0~20mA current output interface.
- It features comprehensive circuit self-diagnosis function, supporting sensor self-test and lens contamination detection.
- Three status indicators independently display the detector's operation, fault, and alarm statuses
- The housing is made of high-strength die-cast aluminum with an IP68 protection rating. It is suitable for use in both general civilian sites and industrial hazardous sites, featuring excellent explosion-proof performance and strong resistance to dust, moisture, and corrosion.

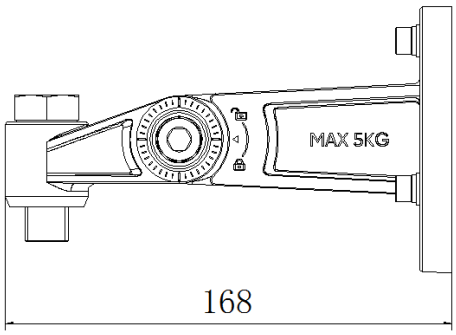
## ▪ Specification

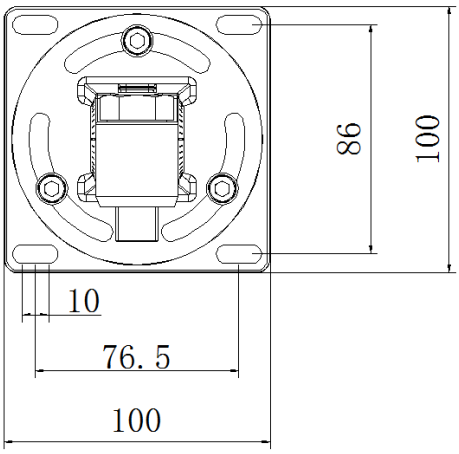
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|---|---|
| **Detector** | |
| Image Sensor | Pyroelectric Infrared Sensors (4 pcs), Ultraviolet Flame Sensor (1 pcs) |
| Detection Range | Within 50 meters |
| Alarm Indicator Light | Red: Alarm<br>Green: Normal<br>Yellow: Fault |
| FoV | Ultraviolet: 120°; Infrared: 110° |
| **Function** | |
| Alarm Threshold | 5 adjustable sensitivity levels (1~5, factory default level 3) |
| **Interface** | |
| Alarm Interface | 2 alarm outputs (Max. supports DC 30 V/2 A or AC 125 V/0.5 A) correspond to alarm and fault<br>status respectively, can be connected to Hikvision flame alarm control panel via input module |
| RS-485 interface | 1 channel (Supports Modbus RTU protocol) |
| Interface | 1 power interface, can be used as Hikvision flame two-wire bus interface (directly connected to Hikvision flame alarm control panel via I/O module or two-wire bus).<br>1 channel 0~20mA interface (Fault: 1mA Normal: 4mA Alarm: 20mA) |
| **General** | |
| Using Environment | -40 °C~75 °C, Humidity less than 95% (non-condensing) |
| Ingress Protection | IP68 (2m, 2h) |
| Mounting Height | Indoor: Higher than 2.5 m<br>Outdoor: Higher than 3.5 m |
| Power Interface Type | 2-pin industrial terminal block, 5.08mm pitch |
| Shell Material | ADC12 |
| Power | Non-polarized DC24V or Hikvision Flame Two-wire Bus |
| Power Consumption | Normal: 20mA Alarm: 30mA (DC: 24 V) |
| Weight | Net Weight 3.3 kg, With Packaging/Bracket 3.9 kg |
| Dimension (L × W × H) | Detector: ϕ115mm * 185mm<br>Bracket: 168mm*100mm*100mm |
| Installation | Product includes bracket<br>Fastened to the flame detector bracket via M16 bolts/screws |

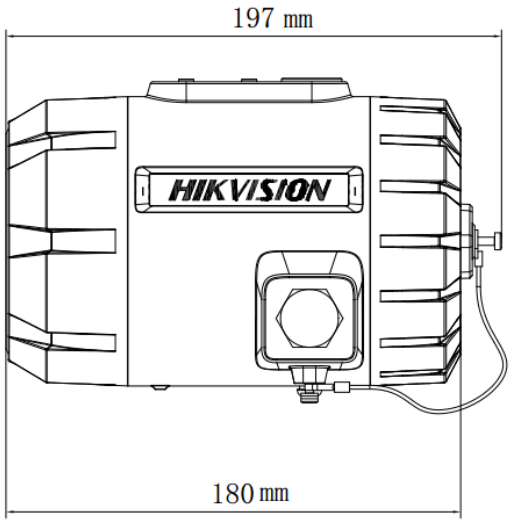
## ▪ Available Model

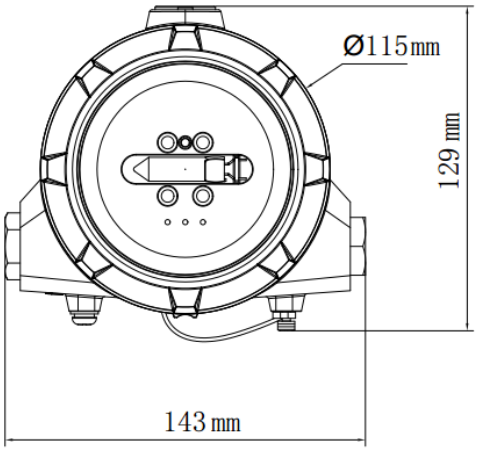
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## ▪ Dimension


MAX 5KG
168


86
100
10
76. 5
100


197 mm
HIKVISION
180 mm


Ø115mm
129 mm
143 mm

HIKFIRE

*Safer Place Better Life*

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