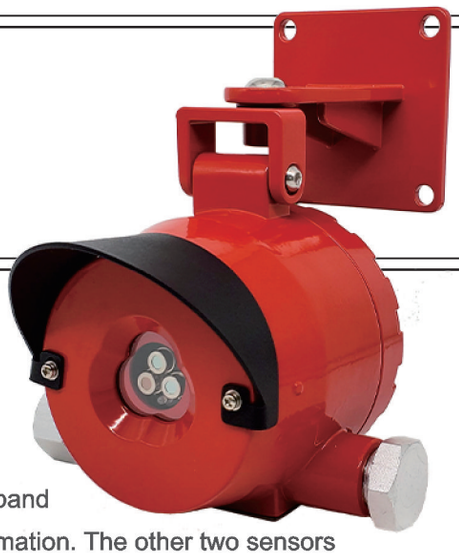
FD10-IR3

Triple IR Flame Detector



FD10-IR3 triple IR flame detector is a new type of intelligent fire detection equipment.

The detectors uses 3 infrared sensors with different wavelengths with narrow-band filtering. One sensor is used to reflect the center wavelength of the flame information. The other two sensors is used to monitor other infrared radiation in the environment. Combining with the flicker characteristics of the flame, analyzing through high-speed microprocessors and calculating by mathematical algorithms, the radiation spectrum with flame characteristics is confirmed as a fire alarm.

The detector suppress the interference of sunlight, lightning, electric welding, thermal radiation, electromagnetic interference, mechanical vibration and other interference, thus achieving the rapid response and accurate identification of the flame signal.

TECHNICAL FEATURES:

- Using high-speed, low-consumption and high-performance 32-bit data processing chip
- Excellent resistance to radio frequency and electromagnetic interference
- Perfect patent algorithm, fast response, high stability, strong anti-false alarm ability
- Detection angle of 100°
- The longest detection distance can reach 50 meters
- Multi-level sensitivity settings to meet the needs of different occasions
- Magnetic bar adjusts sensitivity, no need opening the cover on site
- Explosion-proof design, suitable for hazardous areas in many types of industrial sites

SPECIFICATIONS:

Response spectrum range	3.8μm, 4.3μm, 5.0μm	Longest detection distance	50 meters, 0.3m×0.3m N-heptane fire
Detection object	Flame		
Detection method	Real-time sampling of optical path	Detection angle	IR sensors: 100°
Display method	LED lights	Weight	1.5±0.2kg
Status indication	Green LED flashes to indicate normal operation (the number of flashes every 3 seconds represents the sensitivity level) Red LED always lights to indicate an alarm	Installation method	Wall mounted or lifting or holding-pipe
		Cable entry interface	NPT1/2, default transfer to G1/2 (internal thread)
		Housing material	Copper-free cast aluminum (epoxy resin on the surface)
Operation method	Magnetic bar to adjust sensitivity (4 levels totally)	Ingress protection	IP66
Signal output	4-20mA output 2 relays for fault and alarm (free contact)	Supply voltage	DC24V±6V
		Working current	≤30mA (DC23V)
		Environment temp.	-20℃~+60℃
Response time	<30s	Environment humidity	≤95%RH (no condensation)
Ex grade	Ex d IIC T6 Gb / Ex tD A21		