

Linear infrared beam smoke detector is a fire detector that detects smoke by using the dimming principle.

Relative to the point type smoke detector, Linear light beam smoke detector is suitable for large Spaces without shelter Or a room with special requirements.

Linear beam smoke detectors usually include a transmitter and a receiver.

An infrared detection optical path is formed between the transmitter and the receiver.

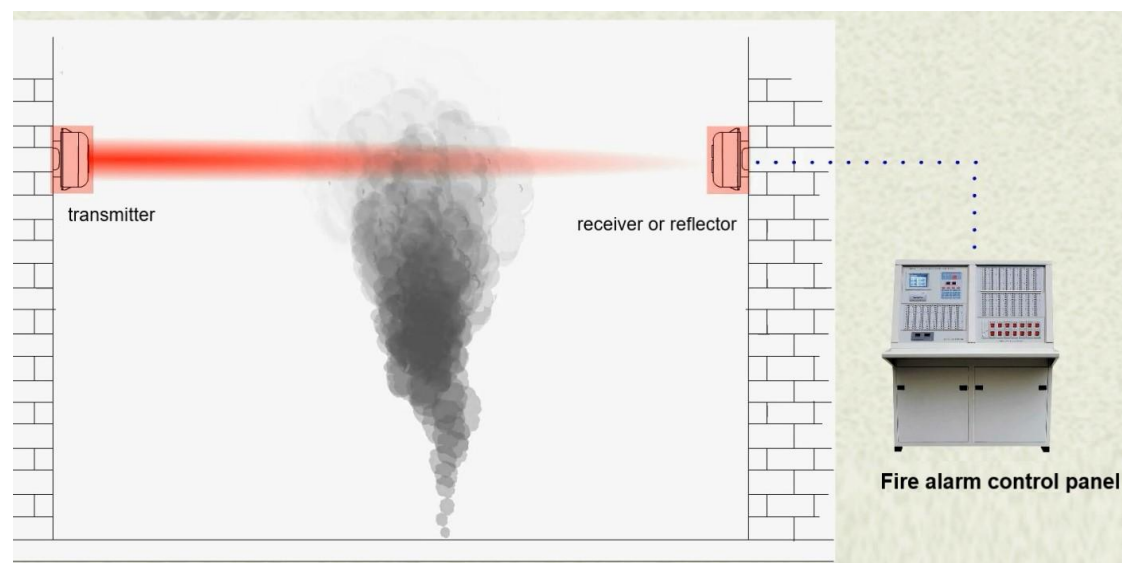
When the smoke rises the beam is blocked and the beam received by the receiver is weakened.

When the reduction rate reaches the preset value, The detector will send out a fire alarm signal.

Linear light beam smoke detector with smoke sensing fire detection function.

At the same time, it can recognize a certain degree of dust pollution, and it can send a fault signal when it is blocked.

Linear light beam smoke detector is suitable for large space fire detection where smoke is formed in the initial fire.



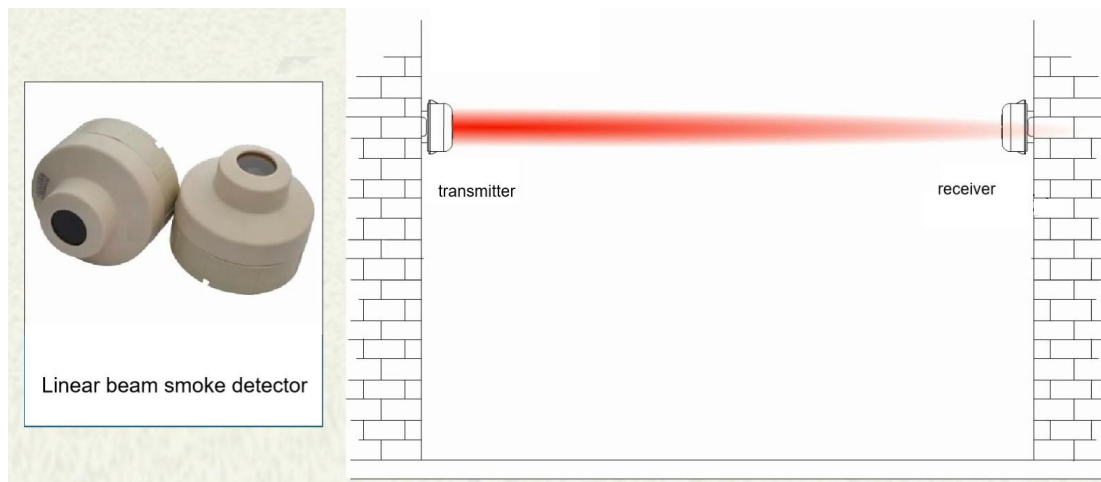
According to the optical path form, the detector can be divided into two types: reflector type and reflector type.

The transmitter and receiver of the counter - fire detector are arranged separately.

The infrared beam is sent from the transmitter and received by a receiver at the other end.

This form of wiring is relatively complex.

In general, Both the transmitter and receiver need to be supplied with power.



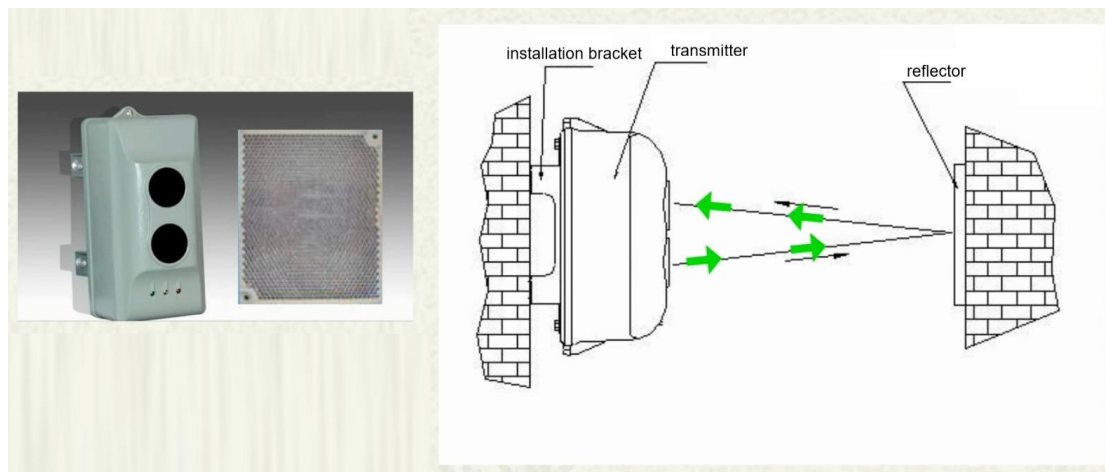
The reflective detector integrates the transmitter and receiver,

The other end is fitted with a reflector plate,

An infrared beam is emitted from the transmitter,

It is reflected by the reflector plate and received by the receiver.

Reflector, also known as mirror, does not need to provide power supply, wiring is relatively simple.



The maximum distance between the detector's transmitter and receiver should not exceed 100 meters.

The minimum distance is determined according to the product parameters of different manufacturers.

Linear light beam smoke detector should be set up in accordance with the following provisions:

For Spaces greater than 12 meters high,

Select two or more fire detectors at the same time.

Places that produced a lot of smoke in the early days of the fire,

Linear light beam smoke detector, pipeline suction smoke detector or picture type fire detector should be selected.



The setting of linear beam smoke detector shall meet the following requirements:

The vertical distance between the beam axis of the detector and the ceiling should be 0.3m ~ 1.0m, and the height from the ground should not exceed 20m.

The horizontal distance between the two adjacent groups of detectors should not be greater than 14m, the horizontal distance between the detector and the side wall should not be greater than 7m, and should not be less than 0.5m, and the distance between the detector's transmitter and receiver should not be more than 100m.

The detector shall be set on a fixed structure.

The detector shall be arranged so that the receiving end is shielded from direct sunlight and artificial light sources.

When selecting a reflective detector, it should be ensured that the detector can respond correctly during any simulation test between the reflective plate and the detector.

Linear light beam smoke detector should not be selected if one of the following conditions is met.

There is a lot of dust, water mist retention.

Vapor and oil mist may be generated.

Under normal conditions there is smoke retention.

The building structure fixed to the detector will have a large displacement due to vibration and other reasons.

From <https://www.vedardsecurity.com/Detector-de-humo-de-haz-ezp-39>

By Vedard Security Alarm Technology