



# *Beam Detectors*



*The 6500 Series*



*The world's finest  
manufacturing  
facility*

- System Sensor's European products are researched, designed and manufactured at our 10,000m<sup>2</sup> state-of-the-art facility in Trieste, Italy. Quite simply, it's the best of its kind. Advanced technology and manufacturing processes coupled with dedicated staff ensure precision manufacturing and incomparable quality control. And 100% testing ensures that nothing leaves our doors unless it's in perfect working order and capable of providing years of trouble-free protection.

We complement this unique offering with a global network of fire systems integration and distribution partners who serve end-users, consulting engineers and specifiers in more than forty countries. All share in our business expertise and, of course, our passion for perfection.



## Conventional & Analogue Beam Detectors

- The 6500 Series consists of a transmitter and a receiver contained in a single enclosure. The emitted infrared beam is returned to the detector from a reflector panel located between 5 and 100 metres away. Special setup mode makes alignment and setup a simple operation for one man; alignment of the detector is simplified with the aid of the detector's "gun sight" targeting device. Alignment of the detector with the reflector can be "fine tuned" with the aid of a numerical signal strength indicator. The unit can be adjusted by  $\pm 10$  degrees in both the horizontal and vertical planes; where greater angular adjustment is required, the multimount accessory enables the detector to move through 180 degrees horizontally.

Automatic drift compensation prevents the long-term build up of dust or dirt on the optical surfaces from making the detector more sensitive; the design of the enclosure also ensures that settling dust attenuates the optical path as little as possible. The sensitivity of the detector can be set to one of four levels between 25% and 50% obscuration, providing application flexibility to suit the environment in which the detector will be installed.

### *Asuretest*

6500 Series has a unique patented remote test capability that fully tests both the optics and the electronics of the device without having to physically access the unit. A servo operated filter is introduced into the optical path, attenuating the beam and causing the unit to go into alarm. Unlike other test methods, this test process provides a complete check of every component in the alarm path without the need for access at high level. In the conventional version, the filter is activated from ground level by a hard-wired connection; in the analogue addressable model it is initiated by a command from the fire control panel. Given that the majority of beam detectors are likely to be installed at a considerable height, the time saved during routine maintenance will be significant.





#### *ANALOGUE 6500 AND 6500S*

The analogue 6500 series beam detector is loop powered with operation from any control panel running the System Sensor Series 200 Advanced Protocol. The 6500S has traditional loop communications, but as it includes the Asuretest remote test option requires an external 15VDC power supply.

#### *CONVENTIONAL 6500 AND 6500S*

The conventional 6500 series beam detectors are both externally powered. The 6500R can be operated from a 12VDC or 24VDC supply enabling its use in either a security or fire system. The Asuretest remote test option requires 15VDC power supply and can only operate in a 24VDC Fire System

#### *REMOTE TEST SWITCH - RTS151KEY*

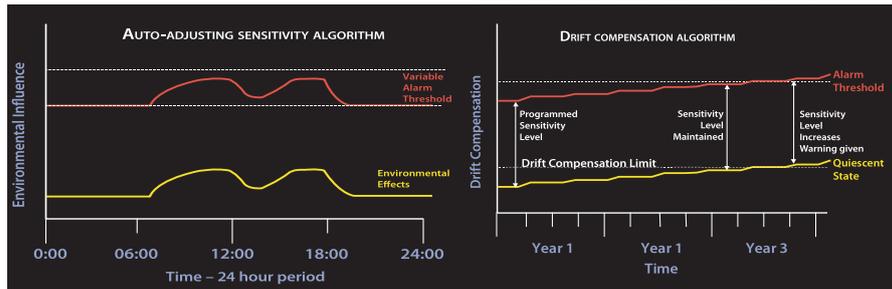
In the conventional version of the beam detector, an optical filter is activated from ground level by a hard-wired connection from the test switch. This test process provides a complete check of every component in the alarm path without the need for access at high level.

#### *OPTIONS*

A number of mounting options and range extensions are available to allow installation in any environment.

## Key Features & Benefits

- Asuretest is available on both addressable and conventional models so there's no need to hire a platform to give high level access to the device in testing
- Two automatically variable sensitivity modes compensate for short term environmental changes
- Automatic drift compensation compensates for long term sensitivity changes caused by environmental factors
- Four fixed sensitivity levels
- 5 – 100m operating range, designed for the protection of buildings such as shopping centres, heritage buildings, warehouses and other structures with large open spaces
- Easy set-up and calibration with visual aids for both coarse and fine adjustment
- Loop-powered addressable or externally powered conventional versions
- The 6500R operates from both 12 and 24VDC, enabling it to be used as part of either a fire or a security system
- Series 200 Advanced Protocol in the addressable models supporting up to 159 detectors and modules on the control panel loops
- Fully integrated and controllable isolation for system mapping in the addressable models
- Total electrical backwards compatibility with existing protocols



The unique auto-adjusting sensitivity algorithm automatically adjusts the alarm threshold to compensate for short-term changes in the environment which could otherwise result in unwanted alarms. Two alternative auto-adjusting sensitivity settings are available. These adjustments do not compromise the detector's ability to respond quickly to a fire incident.



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Installation information: in order to ensure full functionality, refer to the installation instructions as supplied.

