Hydrogen-Ready Flame Scanners
## InSight® 95DSS3 Technical Document

It's not just about UV

With the increasing demand for hydrogen (H2) in the global energy market, correct flame detection and discrimination is critical. Ultraviolet detection is predominantly used for H2 flame detection however this is only one portion of true detection.

H2 is often used with varying mixtures of natural gas or other gasses that creates fluctuating flame profiles. The typical H2 flame wavelength is between 220nm to ~600nm and normally in the region of 300nm. This falls outside the normal detection range of Gieger-Muller tube technology but modern solid state sensors are more than capable. As the H2 / gas mixture varies, the flame flicker frequency changes meaning true detection and discrimination requires flame scanner technology capable of meeting these changing flame profiles.
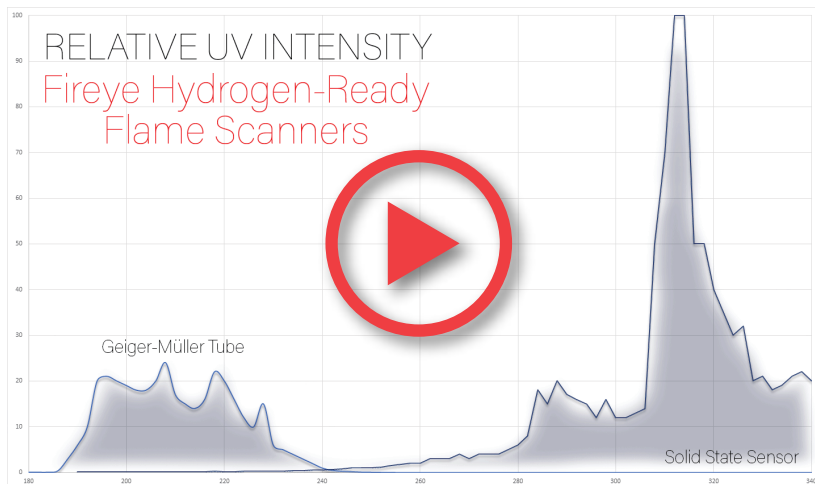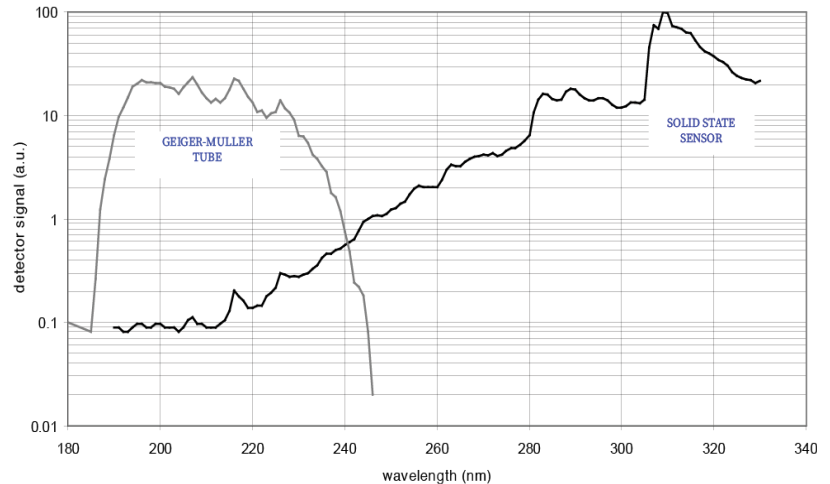
Not all scanners are created equally

Fireye's range of InSight® scanners have proven to be effecting in many H2 and H2 / gas mixture applications. While other flame scanners can detect the UV signal not all have the multiple frequency settings required to actually detect and discriminate. Fireye's InSight® range has 21 selectable frequency ranges along with the ability to store 4 different settings for multiple fuel variations. These memory settings are switchable during detection via 2 wire communication. Fireye's InSight® range is available in IR or UV or a dual UV & IR allowing the ability to add IR detection to the flame discrimination profile if required. ATEX and IECEx hazardous area version of all Fireye InSight® scanners are also available.

- **Infrared, ultraviolet or both**
- **21 frequency ranges**
- **State-of-the-art algorithims**
- **ATEX & IECEx options**
- **Global certifications**
- **SIL 3 certified**

For more information, please [contact] your local Fireye Regional Sales Manager.

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