



CU-95add  
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## Integrated Flame Scanner with Internal Flame Relay

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### **Addendum to CU-95 reduced temperature operation**

The Fireeye Insight flame scanners are microprocessor based flame scanners utilizing solid state infrared (IR) or ultraviolet (UV) or dual (IR and UV) sensors.

Fireeye's engineering department performed a test confirming the ability of our model "INSIGHT" flame scanner to perform at reduced temperatures. Testing was carried out on a Fireeye INSIGHT model 95DSS2-1, although results would apply to all models and versions of the product

The unit was placed in a cold-box set for  $-60\text{ C}$  and left overnight with no power applied to the scanner. The following morning the scanner was powered up and its display read the internal temperature as  $-56\text{ C}$ . A flame was simulated outside of the cold-box through an eight-inch sight-tube and the unit functioned properly.

After apply power to the scanner after 14 minutes the scanner inside temperature was  $-44\text{ C}$ , after 23 minutes  $-37\text{ C}$  and after 2 hours it seemed to have stabilized at  $-32\text{ C}$  although the ambient remained at  $-60\text{ C}$  throughout (internal heat rise)

### **Conclusion:**

We have successfully completed the INSIGHT cold start test. Following an overnight, un-powered soak at  $-60\text{C}$ , the INSIGHT scanner immediately powered up and worked normally.