13 Sirius Rd, Lane Cove, NSW 2066
Telephone: +61 (0)2 9428 7300 • **Facsimile:** +61 (0)2 9428 7399 • **Email:** pogc@hmagroup.com.au
www.hmagroup.com.au
POGC Sensor Technology Pty Ltd : ABN 42 058 605 959

No need for expensive hazardous area test torches anymore with Det-Tronics X3301 Multi Spectrum IR Flame Detector!

The X3301 Multispectrum IR Flame Detector is the future generation detector for performance and technology. The detector utilizes multi-patented signal processing algorithms supported by an embedded 32-bit microprocessor to provide continuous protection in the presence of false alarm sources and environments with infrared radiation present. It is suitable for indoor and outdoor applications that require the highest level of false alarm rejection and fire detection performance.

The X3301 technology **does not** require a test torch for operational testing of window cleanliness or alarm operation. The X3301 is **a self testing device**, which has been developed by Detector Electronics Corporation. The X3301 optical integrity test is built on the patented design concepts of the optical integrity (Oi) feature, and new supervisory operations. The X3301 flame detector factory default setting for the optical integrity is one test on each sensor per minute, and will generate a fault with 3 consecutive failures. The detectors calibrated optical test parameters are evaluated to factory set values for verification that greater than 50% of the detection range remains. The optical integrity test also evaluates each sensors present sensitivity level and compares this to the other sensors values. A fault is generated for under-sensitivity as well as over -sensitivity drift.

The X3301 optical integrity provides fast identification of **ALL** possible fault conditions leaving **NO UNDISCLOSED failure modes.** Even with the success of this automatic test per minute development there are instances when site engineers wish to prove the detectors using a manual test method. The magnetic Oi test performs the same calibrated test as the automatic optical integrity and will generate an alarm condition when greater than 50% of the detection range remains. This method of testing is certified to TUV **SIL-2** and FM standards.

Therefore, the X3301 does not require any test torch as such conventional methods of testing detectors are a tedious and manual process. Moreover such hand-held radiation sources generally generate extremely high or saturating levels of radiation to overcome environmental attenuation factors, and therefore represent a non-calibrated radiation source. When using a non-calibrated test source to trigger a detector without calibrated optics testing, the result is a loose confirmation of detection capability to a saturating simulated fire radiation source. The true ability of the flame detector to respond to a flame is not measured using such a test method. The only true test of an optical flame detectors capability and proper coverage is to conduct routine, live fire tests within the protected area. If this is not possible, then the next best thing is to install a detector with a calibrated, built-in optical integrity test than can be electrically actuated from a remote location. This removes the need for expensive and inconclusive hand-held test torch simulations. The X3301is the **only** flame detector available today that provides this capability.

DET-TRONICS®
A UTC Fire & Security Company