

# SPECIFICATION DATA SHEET TFC13-0024-()



AAE LTD P/N TFC13-0024-3
DUAL CHANNEL SMOKE DETECTOR

**Smoke Detector** — Dual channel configuration that contains both the A and B channel within one unit. It's ideal to be used where mounting space is limited; and offers a significant cost and weight savings over two single detectors. Only one dual detector unit is required per enclosure. Each channel (A and B) has separate and autonomous power and ground, and inputs and outputs.

## **FEATURES**

- Dual Channel Detector Contains both the "A" and "B" channel within one unit.
- Each channel has separate and autonomous power and ground, and inputs and outputs.
- One Dual Channel Detector has the same "footprint" as two Single Channel Detectors
- Higher Sensitivity Fewer detectors required
- Higher Reliability All Solid State Electronics (No Fans or moving parts)
- Greater Immunity to False Alarms
- Microprocessor Based Control
- Unique Chamberless Design

### UNIQUE CHAMBERLESS DESIGN

Scans the air directly above the chassis of the smoke detector. Patented optics and proprietary electronics eliminate the need for a light proof chamber or labyrinth. Cargo compartment air is unimpeded as it passes within the scanning range of the detector. This free-air design results in the most responsive smoke detector available.

## MICROPROCESSOR BASED CONTROL

Utilizes a microprocessor to continuously monitor the critical functions of the smoke detector. The microprocessor is capable of assessing in real-time, the smoke concentration level while performing continuous BIT. This level of monitoring insures that nuisance false alarms due to contamination are prevented.

#### SPECIFICATIONS

- Weight: Approximately 0.80 lb (0.363 kg)
- Operating Temperature: -54°C to +74°C (-65°F to +165°F)
- Altitude: -1,000 to 50,000 feet (15,240 m)
- Test Function: Complete through-the-lens optical and electrical functional check
- Environmental Qualification: Per RTCA/DO-160C
- Software Qualification: Per RTCA/DO-178B, Level B
- Warranty: 3 Years
- Approval: TSO-C1c, Type II
- Input Voltage: 18-32.2 Vdc
- Input Current: Less than 50 Ma (per channel)
- Alarm Output(s): TFC13-0024-3 (Dual Channel) GND/OC 1.0 A (Loop A) and GND/OC 1.0 A (Loop B)
- Smoke Alarm Threshold (% Light Transmission per Foot): 94-96%