

Cirrus HYBRID Detector



The Cirrus HYBRID aspirating detector combines Scatter and Cloud Chamber detection technologies into one unit. With the ability to cover up to four pipes, this dual technology approach provides excellent sensitivity for detecting fire and smoke while significantly reducing false alarms.

Standards / Approvals

- UL
- ULC
- FM

Technical Specification

| | Cirrus HYBRID (Scanner) | Cirrus HYBRID (Non-Scanner) |
|--|--|-------------------------------|
| Supply Voltage | 20 - 28VDC | |
| Current Consumption @ 24VDC, 100% Fan 4 pipe | 840mA quiescent 940mA alarm | 685mA quiescent 785mA alarm |
| Operating Temperature Range | 0°C to 37.8°C (32°F to 100°F) | |
| Application Sampled Air Temperature | -20°C to 60°C (-4°F to 140°F) | |
| Humidity | 10 - 93%RH (no icing / non-condensing) | |
| IP Rating | IP30 | |
| Cable access | 10 x 20mm knock outs | |
| Cable Termination | Screw terminal blocks (0.2 - 2.5mm ² , 30 - 12AWG) | |
| Pipe Outer Diameter | 25mm, push to fit tapered inlet | |
| Alarm Indications | Pre-alarm, Fire 1, Fire 2, Fire 3 | |
| Other Indications | Supply Healthy, General Fault, 7inch LCD colour touch Screen Display | |
| Fault Contact | Rated at 30VDC 1A maximum [Normally closed] | |
| Programmable Output Contacts | 5 contacts rated 30VDC 1A [Volt-free change over contacts with 28 programming options] | |
| Programmable Inputs | 3 monitored inputs that may be configured for Isolate, Reset, Silence, Day/Night, Battery Fault and Mains Fault | |
| Camera | 6 Protec specified IP cameras | |
| Event Log / Data Retention | 24,000 events stored on FIFO basis (alarms, actions, faults and data points) (Approx 30-day historical graph data) | |
| Variable Sensitivity Settings | 7-day programmable settings with 2 time zones per day. Daytime/Night-time setting | |

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Technical Specifications Continued

| | Cirrus HYBRID (Scanner) | Cirrus HYBRID (Non-Scanner) |
|--------------------------------------|--|---|
| Sensitivity Range | Incipient Detection Range: 0.002micron to 1.0micron in diameter. Concentrations of 10,000 particles per cc to 10 million particles per cc. Optical Detection Range: 0.01%obs/m to 20%obs/m 0.003%obs/ft to 6.6%obs/ft Carbon Monoxide Detection Range: 1 to 150 ppm | |
| Threshold Settings Compliant Maximum | Summation of 100 holes per detector @ 25 holes per pipe | Summation of 32 holes per detector @ 8 holes per pipe |
| | *Application dependent. Consult product manual for more information | |
| Sampling Pipe Network | Number of inlet ports: Up to four Pipe Network Design Tool: ProFlow Maximum pipe length: Specific to individual design. To be compliant to local design codes and verified by ProFlow. | |
| Airflow Monitoring | 'High Airflow' and 'Low Airflow' fault monitoring | |
| Weight | 3.5kg (7.7lbs) | |
| Dimensions (mm) | 380(H) x 250(W) x 137(D) | |

Product Codes

| Cirrus HYBRID (Scanner) | | HYBRID Non-display 2 Pipe Scanner | 61-986-H4SND-FMUL2 |
|-------------------------|------------------|-----------------------------------|--------------------|
| HYBRID 2 Pipe Scanner | 61-986-H4S-FMUL2 | HYBRID Non-display 3 Pipe Scanner | 61-986-H4SND-FMUL3 |
| HYBRID 3 Pipe Scanner | 61-986-H4S-FMUL3 | HYBRID Non-display 4 Pipe Scanner | 61-986-H4SND-FMUL4 |
| HYBRID 4 Pipe Scanner | 61-986-H4S-FMUL4 | HYBRID Non-display 2 Pipe Scanner | 61-986-H4SND-FMUL2 |

Product Codes

| Cirrus HYBRID (Non-Scanner) | | HYBRID Non-display 1 Pipe | 61-986-H4ND-FMUL1 |
|-----------------------------|-----------------|---------------------------|-------------------|
| HYBRID 1 Pipe | 61-986-H4-FMUL1 | HYBRID Non-display 2 Pipe | 61-986-H4ND-FMUL2 |
| HYBRID 2 Pipe | 61-986-H4-FMUL2 | HYBRID Non-display 3 Pipe | 61-986-H4ND-FMUL3 |
| HYBRID 3 Pipe | 61-986-H4-FMUL3 | HYBRID Non-display 4 Pipe | 61-986-H4ND-FMUL4 |
| HYBRID 4 Pipe | 61-986-H4-FMUL4 | | |

Note: Non-scanning detectors (standard detectors) - can have up to four sampling pipes which share a common Cloud Chamber to provide fire particle detection. Each pipe inlet is provided with an individual Scatter Chamber Detector to provide optical smoke particle detection. This does not provide individual pipe identification of the Combined Fire & Smoke signals.

Scanning detectors - can have up to four sampling pipes. The air entering each pipe inlet is directed through the Cloud Chamber to provide fire particle detection and an individual Scatter Chamber Detector to provide optical smoke particle detection. This provides individual pipe identification of the Combined Fire & Smoke signals.

Data within this document are subject to change without notice.

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