Cirrus CCD Detector

The Cirrus CCD is an advanced, multi-pipe aspirating detector that uses Cloud Chamber Detection (CCD) technology to provide early warning of fire. This technology ensures the highest level of sensitivity, enabling the device to detect even the slightest traces of combustion particles, even before visible smoke particles are present.

Standards / Approvals

- EN 54-17, EN 54-20
- AS 7240-20
- UKCA
- CE

Technical Specification

Supply Voltage	20 - 28VDC
Current Consumption @ 24VDC, 100% Fan 4 pipe	522mA quiescent | 622mA alarm (1 pipe) 840mA quiescent | 940mA alarm (Scanner 4 pipe)
Operating Temperature Range Temperature Range Tested to EN54-20	0˚C to 45˚C (32˚F to 113˚F) 0˚C to 55˚C (32˚F to 131˚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. Day-time/Night-time setting
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. Carbon Monoxide Detection Range: 1 to 150 ppm

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Technical Specifications Continued

Threshold Settings Recommended Maximum	Class A – 8 holes per pipe @ 115 Alarm Level Class B – 14 holes per pipe @ 145 Alarm Level Class C – 16 holes per pipe @ 400 Alarm Level
Threshold Settings Compliant Maximum EN 54-20	Class A – 8 holes per pipe @ 117 Alarm Level Class B – 14 holes per pipe @ 147 Alarm Level Class C – 16 holes per pipe @ 752 Alarm Level
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)

Application Guide

Class A - High Sensitivity Applications include: - Computer rooms, Cleanrooms, Data Centres, Control Rooms, Valve Halls, Archive Storage, Anechoic Chambers, EDP areas and areas where very high sensitivity is critical.

Class B - Enhanced Sensitivity Applications include: - Historic Buildings, Museums, Hospitals, Airports, Cathedrals, Theatres, Art Galleries, General Warehouses, Atria, Indoor Stadiums, Power and Control Cabinets

Class C - Normal Sensitivity and Harsh Environment Applications include: - Cold Storage Facilities, Specialist Production Facilities, Food Processing Areas, Paper Production Facilities, Transportation Terminals, Dusty Production Facilities, Cable Tunnels and Applications where moderate amounts of dust can be expected.

Product Codes

1 Pipe (with display)	61-986-C1	1 Pipe (no display)	61-986-C1ND
2 Pipe (with display)	61-986-C2S	2 Pipe (no display)	61-986-C2SND
3 Pipe (with display)	61-986-C3S	3 Pipe (no display)	61-986-C3SND
4 Pipe (with display)	61-986-C4S	4 Pipe (no display)	61-986-C4SND