CAST Programmable Multi-Sensor Fire Detector
Part No. CA414

Overview

- A high-quality programmable multi-sensor fire detector for use with C-TEC's XFP & ZFP 'CAST' protocol Addressable Fire Panels.
- LPCB certified to EN54-5, 7 & 17 and CEA 4021. Also Kiwa Telefication & DBI certified to EN54-13.
- Also certified to the relevant parts of EN54 with Swedish certification body SBSC.
- Onboard programmable heat & smoke sensors make it deal for detecting a wide range of fires whilst also reducing false alarms.
- Multiple sensitivity/sensor settings.
- Smart algorithms help reduce false alarms.
- Drift compensation functionality.
- Short circuit loop isolator.
- Includes two 8mm x 2mm ultra-bright red LED indicating strips.
- Different sensitivities can be selected for different times of the day (day/night, building occupied/unoccupied etc).
- 5mA typical alarm current (370uA typical quiescent current) @ 22-40V DC.
- Programmable multi-function status LED.
- Compatible with C-TEC's CA408 CAST base c/w integrated locking mechanism & ID tag.

More Information

'CAST' is the world's most-advanced 'distributed intelligence' fire alarm system protocol. Conceived, designed and realised by C-TEC, it involved the creation of a powerful proprietary communication protocol (C-TEC Addressable System Technology, CAST) and multiple control panels & field devices. Its key features include:- • 255 devices per loop. • Autonomous decision-making for faster response times. • Multiple type codes. • 40V loop drive voltage. • Two 'soft' addressing options – automatic via the panel or manual via a powerful handheld programmer. • Powerful multi-level addressing facilitates easy device addition and swapped device identification. • Multiple functionality at a single address (integrated

devices) via our CAST-PRO devices. • Volumes, tones & detector modes can be changed at compatible panels. • High-speed data transmission and robust data transfer. • Intrinsically EN54-13 compliant. • Geographical location of short and open circuit faults (a short circuit isolator is included as standard in every CAST field device). • Replace device function. • Future seamless integration with other CAST life safety systems reducing energy, servicing, installation and repair costs. • Designed and manufactured in the UK.

Technical Specifications

Approvals/certifications	Certified by SBSC to the relevant parts of EN54, DBI certified to EN54-13, LPCB certified to EN54-5, 7 & 17 and CEA 4021. Also Kiwa Telefication certified to EN54-13
Compatibility	Compatible with C-TEC's XFP/ZFP CAST Protocol Addressable Fire Panels.
Type	Multi-Sensor.
Application/operation	The CA414 multi-sensor has been designed to offer improved detection and reduced incidences of false alarms, As well as operating independently, the smoke & heat sensors combine to give a sensitive response to free burning fires (when a rise in heat is detected, its sensitivity to smoke is increased).
Sensitivity	Mode 1: High Optical + A2 Heat ; Mode 2: Standard Optical; Mode 3: Standard Optical +A2 Heat; Mode 4: Low Optical + A2 Heat; Mode 5: Class A1R Heat.
Supply wiring	2-wire, polarity sensitive.
Supply/operating voltage	22 to 40V DC.
Quiescent current	370µA typical @ 22 to 40V DC.
Alarm current	5mA typical (LEDs illuminated) @ 22 to 40V DC.
Indicators	2 LED indicator strips emitting red light when in alarm offering 360º visibility. Optional remote LED.
Connections	Via CA408 base: 1 +Ve IN (analogue switch); 2 +Ve OUT (analogue switch); 3 Remote LED +Ve; 4 0V; 5 0V; 6 Screen; 7 Screen.
Product dimensions (mm)	102.2mm diameter x 37mm deep (detector only); 102.2mm diameter x 57.5mm deep (detector in base).
IP Rating	IP42.
Weight	99g (not in base); 154g (in base).
Operating conditions/temperature	-20ºC to +85ºC.
Notes	Requires a CA408 CAST base. CA408R relay base also available.