



# THE FUTURE OF FIRE DETECTION IS HERE



HEAT DETECTION

SMOKE DETECTION

CO FIRE DETECTION

C-3-9.4 WHITE VAD

O-C-1.9-4 RED VAD

92DB(A) SOUNDER  
VOICE SOUNDER

**MULTI SENSOR DETECTION**



**PROVEN FALSE ALARM REDUCTION**

**PROTECTION FROM FIRE LIKE NEVER BEFORE**





# THE FUTURE OF FIRE DETECTION IS HERE

*Detects real fires quickly*

*Simplifies installation*

*Reduces false alarms reliably*

*Signals true alarm conditions decisively*





Proven false alarm reduction and protection from fire like never before – introducing CAST-PRO, C-TEC's new range of integrated fire detection & alarm devices.

With heat, smoke and CO fire detection, plus a tone sounder or a voice sounder and a visual alarm device all in one unit, CAST-PRO represents a major breakthrough in addressable fire alarm system technology.

British-built and third-party certified to all relevant EN 54 product standards, CAST-PRO utilises some of the world's most advanced, innovative and patented technology to provide features and algorithms that adapt rapidly to changes in the environment to detect

real fires quickly, reduce false alarms reliably and signal true fire alarm conditions decisively.

Compatible with C-TEC's ZFP & XFP CAST addressable fire panels and our ENVISION Cloud-based data management, test and commissioning software, CAST-PRO gives you everything you need to satisfy the requirements of today's complex multi-purpose buildings.

Improved protection, simplified installation and a reduced carbon footprint - CAST-PRO offers all this and more – at a very competitive price.

Read on to discover more.



**HEAT SMOKE**

**INTEGRATED**

**MULTI-SENSOR  
WHITE VAD**



**CO FIRE**

**92db SOUNDER  
VOICE SOUNDER  
RED VAD**

OPEN TO  
SEE THE  
**FUTURE**  
OF FIRE  
DETECTION





HEAT SMOKE **cast** CO FIRE  
**INTEGRATED**  
MULTI-SENSOR WHITE VAD 92db SOUNDER  
VOICE SOUNDER RED VAD

KEY FEATURES



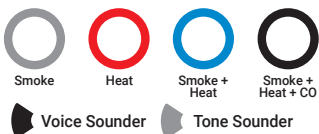
Revolutionary MASC™ smoke detection chamber with non-focal non-linear prismatic angular bandpass filter - detects real fires quickly & filters out false alarms effectively

Powerful multiple tones (C available)

Attractive compact and unobtrusive housing is ideal for all environments

Sophisticated thermal & smoke flow vanes ensure optimum operation from all angles

Snap-in inserts identify the exact device type



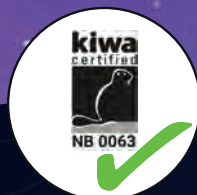
Ultra-efficient C-3-9.4 rated EN54-23 white VAD facilitates compliance with the Equality Act (red VAD variants also available rated at O-C-1.9-4)



Second Generation C-TEC designed lens maximises light output with minimal current draw

Dual LED indicator strips offer 360° visibility from all angles

IP21C rated as standard – no need for additional gaskets



Multiple fully EN54 certified detection & alarm functions – heat, smoke, CO, tone sounder or voice sounder and VAD – in one compact CAST-PRO device



Powerful CAST-PRO sensing and programmable operation modes allow a site to be set up to suit its exact requirements



Pioneering CAST-PRO fire sensor design algorithms mean fewer false alarms but a very rapid response to real fire alarm conditions



Sophisticated AFFIRM™ algorithms filter out unwanted alarms caused by dust, steam and insects but respond to real fires very quickly

10 year EN54-31 certified self-testing CO cell with the ability to detect EN 54-26/30 fire events and EN 50291 toxic gas events

Practical snap-in ID tag for device labelling

92dbA sound output with EN54-3 certified alarm certified voice variants also with custom messages (on special order)

Universal electronics-free CAST base with plenty of space for cable and connections

Fully SMT PCB with conformally coated components for maximum reliability, manufactured at C-TEC's state-of-the-art UK facility

Cutting-edge contamination traps extend device life (contamination levels are reported to the ZFP fire alarm panel and ENVISION™ Cloud)

Integral EN54-17 short circuit loop isolator

Responsive sub-miniature thermistor constantly monitors for temperature changes in line with EN54-5

**To get the full picture  
scan the code or visit  
[cast-pro.com](http://cast-pro.com)**



Less wiring & lower installation costs – advanced CAST-PRO single device detection & alarm solution provides multiple on-site engineer and end user benefits



Fully compatible with C-TEC's ENVISION Cloud based 'Fire IoT' data management software via a ZFP or XFP CAST addressable fire alarm panel



Designed and manufactured by C-TEC in its multiple third-party factory-process approved UK headquarters and dedicated R&D facility



Environmentally-friendly – CAST-PRO's highly efficient integrated single device solution means less plastic and a lower carbon footprint

# CAST-PRO Technical Specifications & Order Codes

ORDER CODE (White Housing)	CP416	CP402	CP414	CP414T	CP414V	CP414TV	CP414TVR	CP414VV	CP414VVR
ORDER CODE (Black Housing)	n/a		CP414B	n/a		CP414BTV	n/a		
DESCRIPTION	CAST-PRO Smoke Detector	CAST-PRO Heat Detector	CAST-PRO Multisensor Detector	CAST-PRO Multisensor Detector c/w Tone Sounder	CAST-PRO Multisensor Detector c/w Voice Sounder	CAST-PRO Multisensor Detector c/w Tone Sounder & White VAD	CAST-PRO Multisensor Detector c/w Tone Sounder & Red VAD	CAST-PRO Multisensor Detector c/w Voice Sounder & White VAD	CAST-PRO Multisensor Detector c/w Voice Sounder & Red VAD
CERTIFIED STANDARDS	EN 54-7 EN 54-13 EN 54-17	EN 54-5 EN 54-13 EN 54-17	EN 54-5 EN 54-7 EN 54-13 EN 54-17 EN 54-29	EN 54-3, EN 54-5, EN 54-7, EN 54-13 EN 54-17, EN 54-29		EN 54-3, EN 54-5, EN 54-7, EN 54-13 EN 54-17, EN 54-23, EN 54-29			
CPR NUMBER	0063-CPR- 242190022	0063-CPR- 242190023	0063-CPR- 242190021	0063-CPR-242190019		0063-CPR-242190011			
COMPATIBLE PANELS	ZFP CAST 1-8 LOOP PANELS & XFP CAST 1-2 LOOP PANELS								
COMPATIBLE BASE	CA408 CAST detector base, ceiling mounting only								
INDICATORS	Two red LED indicator strips offering 360° visibility								
DIMENSIONS	105mm diameter, 48mm deep (65mm deep on CA408 base)					105mm diameter, 51mm deep (68mm deep on CA408 base)			
SUPPLY VOLTAGE	22 to 40Vdc			28 to 40Vdc					
ALARM CURRENT Imax @ Vmin @ Max Vol, VAD On	<1mA			5.4mA	17.1mA	13.2mA		24.9mA	
ALARM CURRENT Iavg @ Vmin @ Max Vol, VAD On	<1mA			5.0mA	9.1mA	10.8mA		14.6mA	
POWER @ 28Vdc	<28mW			140mW	255mW	300mW		410mW	
ENVIRONMENT TYPE	Type A (Indoor Use)								
QUIESCENT @ 40Vdc	570µA	570µA	570µA	590µA	590µA	590µA		590µA	
SOUND PRESSURE LEVEL (LAFmax) at Vmax @ 1m	n/a			92dB(A) ± 3dB(A) @ 1m on Tone No.6					
IP RATING (EN 60529)	IP21C								
VAD CATEGORY (EN 54-23)	n/a					C-3-9.4	O-C-1.9-4	C-3-9.4	O-C-1.9-4
VAD EFFICIENCY	n/a					10m²/mA	2m²/mA	10m²/mA	2m²/mA
VAD TEMPORAL PATTERN	n/a					0.5Hz synchronised			
CONSTRUCTION MATERIAL	Polycarbonate								
WEIGHT (minus base)	118g	118g	119g	122g	122g	130g		131g	
OPERATING TEMP.	-10°C to +55°C with max. 95% RH (non-condensing)								

ORDER CODE (White Housing)	CP411	CP411T	CP411V	CP411TV	CP411TVR	CP411VV	CP411VVR
DESCRIPTION	CAST-PRO CO Multisensor Detector	CAST-PRO CO Multisensor Detector c/w Tone Sounder	CAST-PRO CO Multisensor Detector c/w Voice Sounder	CAST-PRO CO Multisensor Detector c/w Tone Sounder & White VAD	CAST-PRO CO Multisensor Detector c/w Tone Sounder & Red VAD	CAST-PRO CO Multisensor Detector c/w Voice Sounder & White VAD	CAST-PRO CO Multisensor Detector c/w Voice Sounder & Red VAD
CERTIFIED STANDARDS	EN 54-5, EN 54-7, EN 54-13, EN 54-17, EN 54-29, EN 54-31	EN 54-3, EN 54-5, EN 54-7, EN 54-13 EN 54-17, EN 54-29, EN 54-31		EN 54-3, EN 54-5, EN 54-7, EN 54-13, EN 54-17, EN 54-23, EN 54-29, EN 54-31			
CPR NUMBER	0063-CPR- 242190020	0063-CPR-242190012		0063-CPR-212190016			
COMPATIBLE PANELS	ZFP CAST 1-8 LOOP PANELS & XFP CAST 1-2 LOOP PANELS						
COMPATIBLE BASE	CA408 CAST detector base, ceiling mounting only						
INDICATORS	Two red LED indicator strips offering 360° visibility						
DIMENSIONS	105mm diameter, 48mm deep (65mm deep on a CA408 base)			105mm diameter, 51mm deep (68mm deep when on CA408 base)			
SUPPLY VOLTAGE	22 to 40Vdc		28 to 40Vdc				
ALARM CURRENT Imax @ Vmin @ Max Vol, VAD On	<1mA	5.4mA	17.1mA	13.2mA		24.9mA	
ALARM CURRENT Iavg @ Vmin @ Max Vol, VAD On	<1mA	5.0mA	9.1mA	10.8mA		14.6mA	
POWER @ 28Vdc	<28mA	140mW	255mW	300mW		410mW	
ENVIRONMENT TYPE	Type A (Indoor Use)						
QUIESCENT @ 40Vdc	630µA						
SOUND PRESSURE LEVEL (LAFmax) at Vmax @ 1m	n/a	92dB(A) ± 3dB(A) @ 1m on Tone No.6					
IP RATING (EN 60529)	IP21C						
VAD CATEGORY (EN 54-23)	n/a			C-3-9.4	O-C-1.9-4	C-3-9.4	O-C-1.9-4
VAD EFFICIENCY	n/a			10m²/mA	2m²/mA	10m²/mA	2m²/mA
VAD TEMPORAL PATTERN	n/a			0.5Hz synchronised			
CONSTRUCTION MATERIAL	Polycarbonate						
WEIGHT (minus base)	122g	125g	125g	133g		134g	
OPERATING TEMP.	-10°C to +55°C with max. 95% RH (non-condensing)						

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