

# PYRONICS



## ■ PYR-FA-CHA-MD MULTI-SENSOR SMOKE AND HEAT DETECTOR

The PYR-FA-CHA-MD is a plug in point-type multi-sensor photoelectric smoke and heat rate compensation detector with an internal microprocessor supporting two-wire advanced communication and electronic coding. The detector communicates with the fire alarm control panel in real-time the smoke concentration data, the detector status as well as receives and executes control commands from the fire alarm control panel.

## KEY FEATURES

- Modern Design and Feel
- Low-Profile
- Electronic Addressing via Handheld Programmer
- Temperature, Humidity and Dust Accumulation Drift Compensation
- Saves the Latest 100 Events on Device
- Polarity Insensitive for Ease of Installation and Maintenance
- Built-in Dual LED Indicator for Clear 360° Viewing
- Uniquely Advanced Optical Sensing Chamber and Heat Rate Compensation Sensing Technology Engineered to Sense Smoke and Heat Twice as Fast from a Wide Range of Combustion Sources and with Less False Alarms.
- 3 Year Warranty



# SPECIFICATIONS

## GENERAL

Technology	Microprocessor Based
Sensing Method	Photoelectric using Optical Sensing Chamber and Heat Rate Compensation
Addressing	Software Addressing
Memory	100 Latest Events
Wiring	2 Wire (Polarity Insensitive)
Drift Compensation	5 Levels (Automatic)
LED	Dual LED for 360° Visibility
Base	Twist and Lock Base

## PERFORMANCE

Modes of Operation	Smoke A2R Heat A2S Heat Smoke and A2R Heat Smoke and A2 Heat
Detection Speed *	12 Seconds
Temperature Alarm	57 °C ± 3 °C
Air Velocity	0 to 20 Meters / Second
Mounting	Ceiling or Side Wall
Spacing **	15.2 Meters (Center to Center)
Insect Screen	Yes
EMI Protection	Yes

## ELECTRICAL

Operating Voltage	24 V (Pulse Modulation)
Standby Current	300 µA
Alarm Current	1.5 mA (Without remote LED Indicator) 3.5 mA (With remote LED Indicator)

## MECHANICAL

Material	High Impact Durable Engineered Polymer
Dimensions	φ 100 mm x 46 mm (Diameter x Height)
Weight	123 gm (Including Base)

## ENVIRONMENTAL

Application	Indoor Installation Only
Operating Temperature	-10 °C to +55 °C
Storage Temperature	-20 °C to +60 °C
Humidity	0 to 95% (Relative Humidity)

## REGULATORY

Certification	LPCB according to EN54-7 and EN54-5
Declaration	CE

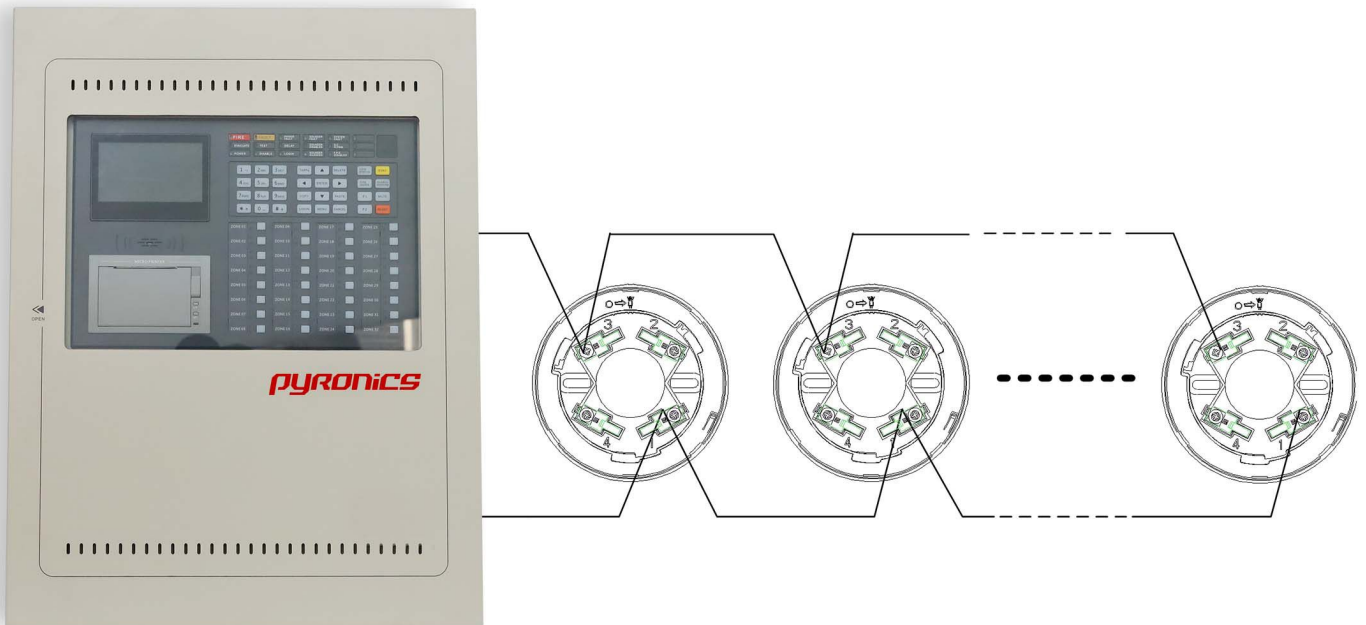


\* Detection speed is calculated from the time of smoke entering the device or heat arriving at the device till the alarm appears on the panel.

\*\* Recommended spacing at height of 3.1 meters.



## WIRING



- Point 1 is Control Panel / Next Device Terminal
- Point 2 is the Remote LED Indicator -ve Terminal
- Point 3 is Control Panel / Next Device Terminal
- Point 4 is the Remote LED Indicator +ve Terminal

# ORDERING INFORMATION

Model	Description
PYR-FA-CHA-MD	MULTI-SENSOR SMOKE AND HEAT DETECTOR
PYR-FA-CHA-DB	STANDARD DETECTOR BASE

pyronics

Adkinns | 5063 Commercial Circle,  
HQ | Concord, CA 94520  
United States  
Email | [info@pyronics.us](mailto:info@pyronics.us)  
Website | [www.Pyronics.us](http://www.Pyronics.us)

Pyronics warrants all its products against any and all manufacturing defects from the date of product delivery from the factory and/or distribution center. Pyronics's Challenger series has a warranty of 3 years

PYR-FA-CHA-MD – Datasheet V.001

**pyronics**

©2022, Pyronics, all rights reserved . We reserve the right to change the design and specifications without prior notice. Pyronics is a life safety and property protection systems manufacturer that is fully owned by Adkinns Inc.