

# APPLICATION NOTE 152

## ACD Multi-Sensor Mode Selection

Your Safety, Our Technology

ESPintelligent

ACD-EN  
Multi-Criteria Sensor



### Description

Introducing the ACD-EN, the most sophisticated multi-sensor released to market to date. This revolutionary product offers a staggering 24 EN approved modes of operation, including combinations of smoke detection, fixed temperature heat detection, rate of rise heat detection, CO detection and COHb detection; making it ideal for a variety of applications. The installer also has the ability to select a day mode and a night mode; increasing flexibility and ensuring reliability.

The ACD-EN is also enhanced for false alarm reduction. In modes featuring the Reduced False Alarm aspect (+RFA), the sensor will automatically adjust its sensitivity based on its surroundings, over time. The ACD-EN is installed with a default time delay. If the environment is clean with no smoke detected for a period of time, this time delay is reduced. If the environment continues to be clean, the time delay is reduced again. However, if transient smoke is detected, the time delay is increased. Any changes in CO and/or temperature will also automatically adjust the sensitivity levels up. We call this ground-breaking algorithm 'Suitable Moving Average Time' (SMART).

### The Mode Selector Chart

	☀ Day	☾ Night
Hotel Room	8D	8D
Hospital Common Areas	99	99
Care Homes	99	8D
Church or Cathedral	8D	99
Boiler Room	89	89
Data Centre	80	80
Electrical Room	80	81
Laboratories	8D	8D
Warehouse	89	89
Workshop	80	81
Court Room	8D	99
Above Control Panel	83	83
Bathroom or Toilet	87	80
Lift Shaft	81	81
Hallway or Corridor	82	83
Kitchen	89	80
Reception Area	82	82
Meeting Room	8D	8D
Office	9A	9A
Stairwell	82	82
Storage Room	80	81
Classroom	8D	8D
College or University Building	9A	99
Student Accom*	99	8D

