Maximize Cost Performance for "Small Area" Very Early Warning Smoke Detection System

- ✓ Alarm Sensitivity Range: 0.005~20%/m
- ✓ Four Alarm Levels
- ✓ 7 Relay Outputs
- ✓ 3 in 1 Control/Display/Programmer Front Panel
- ✓ RS485 Network
- ✓ Support Modbus RTU Open Protocol

AVA uses high power, short wavelength blue LED as the detection light source. It is very sensitive to small smoke particles generated during the incipient stage of a fire, at which time the some is invisible to human eyes. The highest alarm sensitivity of AVA high sensitivity smoke detector is 0.005%/m, which is 1000 times more sensitive to conventional point type smoke detector.

3 in 1 Front Panel: Control / Display / Programmer

- ● Control
  - <Reset>, <Isolate>, <Silence> & <Test> buttons
- ● Display
  - 20 segment smoke level bargraph
  - 6-digits Numerical LEDs Display Detector Information
    - Display Content 1: Real Time Smoke Level
    - Display Content 2: Real Time Airflow Level Airflow
    - Display Content 3: Device Address
    - Display Content 4: Active Event & Codes
  - 4 Fire Alarm Indicators
    - Alert, Action, Fire 1, Fire 2
  - 4 Fault Indicators
    - Detector, Airflow, System, Auxiliary
  - Isolated indicator
  - Beeper
- ● Programmer
  - Press <Func.> button for 2 seconds to login the Program Mode
  - Enter Access Password
  - Bargraph and 6-digits 7-Numerical LEDs display the function.
  - <Left>/<Right> buttons to switch function.
  - <Plus>/<Minus> buttons to change for 2 sec
  - Press <Enter> for 2 seconds to confirm setting.

For Detail Information Please refers to QUARTAS-500s Manual
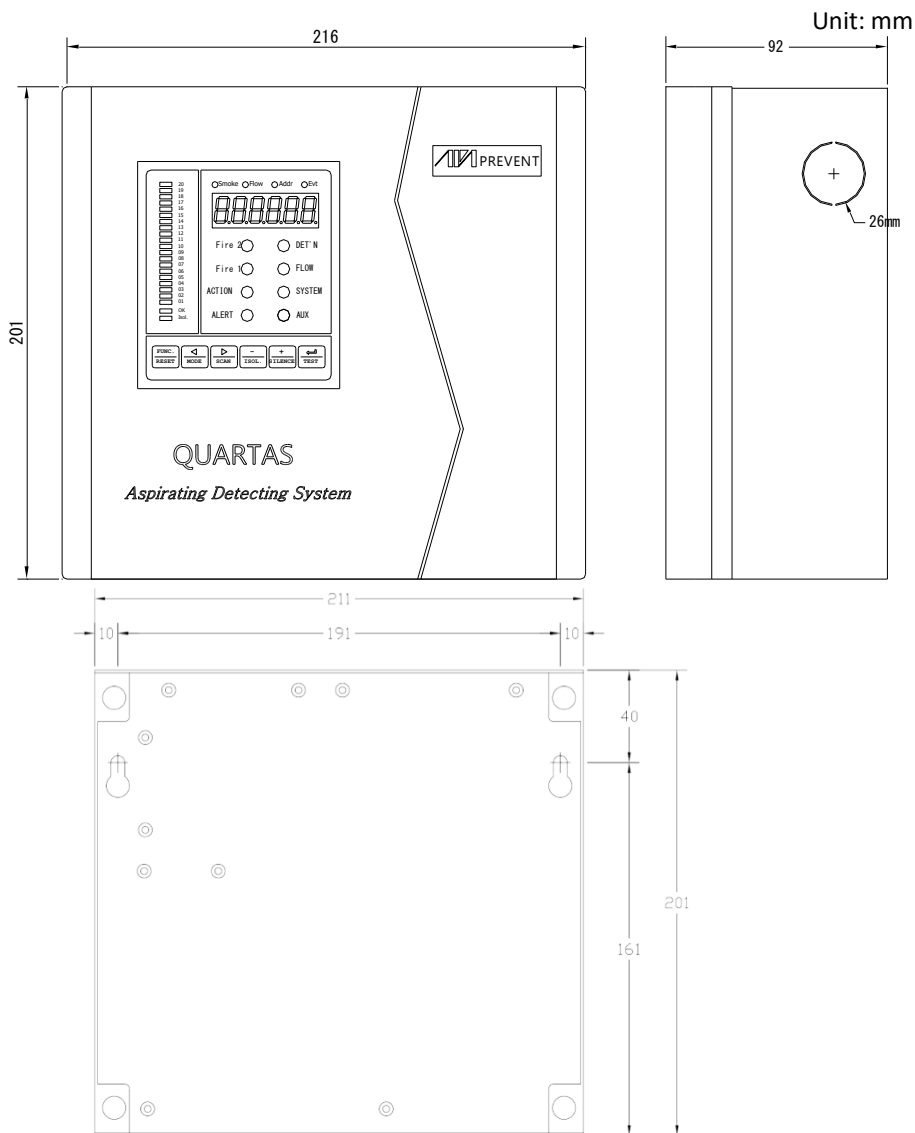
QUARTAS 3 in 1 Front Panel

Specification

Smoke Detection Principle
- Forward Light Scattering Mass Detection

Smoke Detection Range
- 0.001~25%/m

Alarm Sensitivity Range:
- 0.005~20%/m

Single Pipe Length*:
- 100m (18 Holes)
- 60m (25 Holes)

Two Branch Pipe Length*:
- 2x80m (2x15 Holes)

Four Branch Pipe Length*:
- 4x60m (4x10 Holes)

Sampling Pipe
- Material: ABS/UPVC
- OD: 25mm

Alarm Levels and Time Delay
- Alert (0~60 sec.)
- Action (0~60 sec.)
- Fire-1 (0~60 sec.)
- Fire-2 (0~60 sec.)

Environment Smoke Learning
- 24hous, 365days Non-Stop Smoke Background Level Learning

Flow Detection Principle:
- Heat Mass Detection

Flow Monitoring
- Pipe Flow Normalize to 100%
- Flow High and Flow Low Fault
- Adjustable Flow Detection Sensitivity

*Note: Per EN54-20 Class A Sensitivity. Please refer to AVA design manual for the details about pipe length and the number of sampling holes.

QUARTAS

Single Zone Aspirating Smoke Detector

Dimensions

Unit: mm

216

92

201

26mm

211

10 191 10

40

201

161

Flow Sensor

Aspirator

Filter

Termination Board

High Sensitivity Smoke Detector

Internal Structure

Termination Board

Relay Output
- 7 Relays on Termination Board (Configurable)
- Rating: 2A@30 VDC

General Purpose Inputs
- 4xGPIs (Configurable)
- GPI Functions: Reset/Isolate/Silence/Test/Scan/ Mains Fault/Battery Fault/Power Fault Sensitivity Mode 1/Sensitivity Mode 2/UDI-1/UDI-2/UDI-4/UDI-5

*Note: UDI, User Defined Input

Communication
- RS-485 Network
- Maximum number of devices on Network: 250
- Built in repeater
- Maximum cable length between two adjacent devices: 1.2km
- Support Modbus RTU open protocol

Event Logs
- Number of Events: 183000
- Event Type: Alarm/Fault/Operation/Smoke/Flow/Auxiliary Gas Sensors

Operating Conditions
- Ambient Temperature: 0~40 ℃
- Sampling Air Temperature: -20~60 ℃
- Humidity: 10~95% RH Non Condensing

Power
- 24 ±4.8 Vdc
- 175~320mA (Aspirators setting from 1 to 10）

Dimension
- Length=216mm
- Width=201mm
- Height=92mm

Weight
- Net Weight：2.5kg