

## Description

603 photoelectric smoke/heat detectors are microprocessor controlled state-of-the-art wireless detectors, suitable for connection to Numens wireless addressable fire detection control and indicating equipment.

603 smoke/heat detectors use a wireless transmission path to connect to a node located on the addressable loop. Up to 125 detectors can be wireless connected to each addressable loop.

If the wireless detector is removed from its base, a fault signal will be released to the control and indicating equipment.

Advanced electronics in conjunction with a photoelectric smoke sensing chamber provides early detection of fire and high immunity against unwanted alarms.

An internal battery provides 10 years of normal operation.

The 603 wireless detector range provides fire detection and alarm system designers with a flexible smoke/heat detector for life safety and property protection applications.

## Features

- Wireless transmission path
- Internal antenna
- Photoelectric smoke sensing chamber technology
- Integrated indicator provides visual indication of an alarm condition
- Test button verifies battery and detector operation
- Smoke chamber and heat sensor fault visual indication
- Internal power
- Low battery visual warning indication
- Up to 32 devices can be connected to the wireless node.
- User-replaceable battery provides up to 10 years operation under normal conditions
- Surface-mount device (SMD) circuit board design
- Easy DIP-switch loop and address setting
- Easy installation and configuration
- Low maintenance

## Compliance

603 smoke/heat detectors have the following compliance <sup>a</sup>.

|         | EN 54-5 <sup>b</sup> | EN 54-7 <sup>c</sup> | CE <sup>d</sup> |
|---------|----------------------|----------------------|-----------------|
| 603-001 | ✓                    | ✓                    | ✓               |

<sup>a</sup> Third-party conformance assessment has not been undertaken.

<sup>b</sup> EN 54-5 Fire detection and fire alarm systems. Heat detectors. Point detectors

<sup>c</sup> EN 54-7 Fire detection and fire alarm systems. Smoke detectors. Point detectors using scattered light, transmitted light or ionization

<sup>d</sup> Conformité Européenne



603-001 wireless smoke/heat detector

## Specifications

| Power Supply                                                   | 603-001                                    |
|----------------------------------------------------------------|--------------------------------------------|
| Power source                                                   | DC 3 V                                     |
| Quiescent current                                              | 10 µA                                      |
| Quiescent condition indication                                 | Synchronously flashing red LEDs every 40 s |
| Battery life expectancy                                        | 10 years                                   |
| Low battery indication                                         | Two LEDs flash alternately once every 40s  |
| Alarm Condition                                                |                                            |
| Alarm response threshold                                       | (0.08 ~ 0.15) dB/m                         |
| Alarm response threshold (temperature rate-of-rise)            | < 20 °C / min                              |
| Alarm response threshold (fixed temperature)                   | 57 °C                                      |
| Alarm condition current                                        | 2 mA                                       |
| Alarm indicator                                                | Flashing red LED every 1s                  |
| Test Condition                                                 |                                            |
| Test condition visual indication                               | Flashing red LED every 1 s                 |
| Wireless                                                       |                                            |
| Address range                                                  | 1 ~ 125                                    |
| Number of devices connected to a wireless node                 | 32                                         |
| Wireless radio interconnection operating frequencies           | 433 MHz, 868 MHz                           |
| Maximum distance between wireless device and node <sup>a</sup> | 300 m                                      |
| Node configuration mode indication                             | Flashing red LED every 0.5 s               |
| Environmental                                                  |                                            |
| Operating temperature                                          | (-10 ~ +55) °C                             |
| Operating humidity                                             | (10 ~ 95) % RH, non-condensing             |
| Storage temperature                                            | (-25 ~ +80) °C                             |
| Storage humidity                                               | (0 ~ 98) % RH, non-condensing              |
| Miscellaneous                                                  |                                            |
| Dimensions                                                     | Φ 102 mm × 65mm                            |

<sup>a</sup> Distance in free air.

## Ordering Information

603-001

View the complete range of products at  
[www.numens.com](http://www.numens.com)

