

# Agile<sup>TM</sup>

## Wireless Fire Detection



# Stay Connected Stay Protected

The new Agile Wireless Fire Detection system offers unmatched levels of communication reliability and installation flexibility. It provides a robust and efficient method of delivering an integrated smoke detection solution across a wider variety of applications, with greater simplicity and scalability.

The platform is built on a powerful mesh technology, with multiple communication paths to minimise interference and maximise system robustness.

## Key Applications

### Historic & Hard-to-Wire Buildings

The Agile wireless platform is ideally suited to heritage sites, museums or complex applications with aesthetic challenges or otherwise limiting restrictions. For example asbestos, concrete walls and ceilings or inaccessible wiring.

### Refurbishments & Retrofits

Since the Agile platform can be used effectively as a wired system extension, it is well suited to refurbished buildings or retrofits where it is uneconomical or impractical to have a wired installation. Agile IQ wireless software tool allow rapid installation without business disruption.

### Temporary Fire Protection & Time Pressured Projects

The flexibility and speed of installation of the Agile wireless fire detection solution makes it the first choice technology for applications where temporary fire protection is needed such as construction sites, exhibition booths and portable classrooms. It is also ideal for time pressured projects with short deadlines.







# Cutting Edge Technology

## Mesh Network Communication Reliability

The Agile system offers the highest levels of communication reliability due to patented mesh network technology.

Mesh technology provides multiple connection paths between each transmitter and receiver allowing continuous, bidirectional communication.

If a connection path is broken, the mesh network automatically re-routes the signal, providing a secure and uninterrupted network.

The ability to switch between as many as 18 radio channels and two antennas per device along with an extended communication range provides greater tolerance to interference, improving overall system robustness



### 1. Mesh network

Multiple communication paths guarantees uninterrupted communications



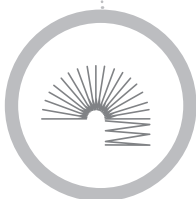
### 2. Wireless monitoring

Visual network representation for easier troubleshooting

## 5 Key reasons to choose Agile mesh technology

### 3. Installation flexibility

Enables easy installation of system extensions or temporary systems



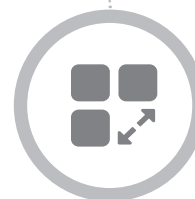
### 4. Smart Battery Monitoring

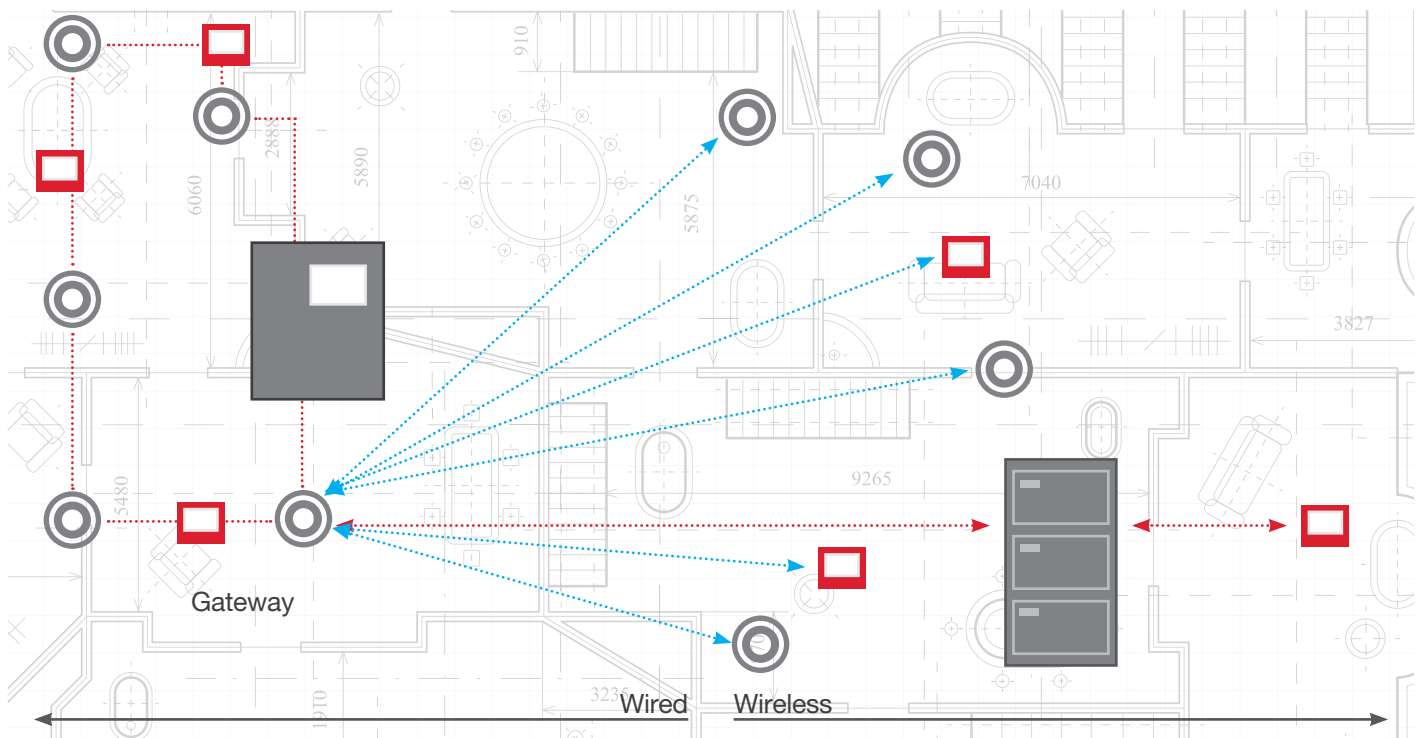
Accurate service life prediction



### 5. communication range

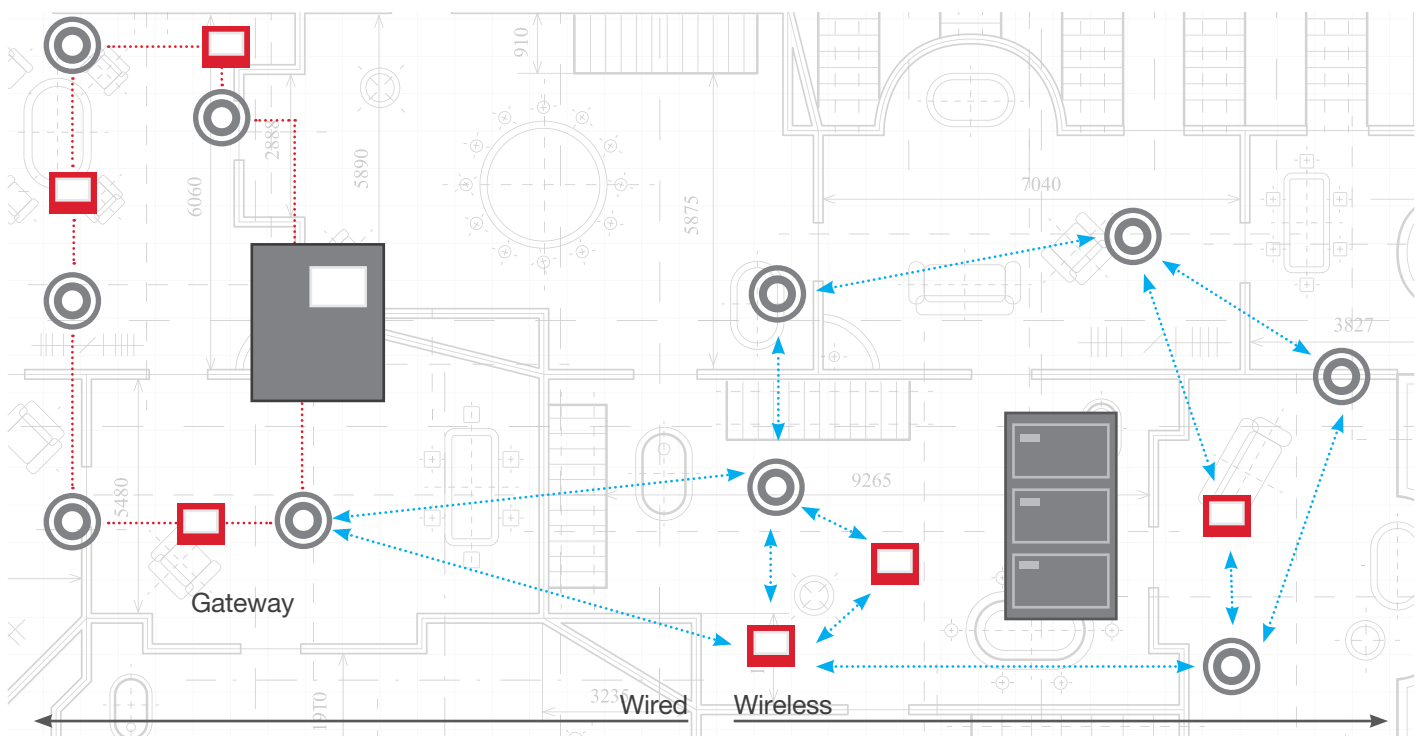
Provides more margin against interference





## Star Network

In a star network, wireless devices are in direct communication with either a central wireless gateway or a repeater. Temporary obstacles such as metal filing cabinets or new internal walls can affect the system integrity causing a break in communication. This renders the system partially inactive resulting in the area no longer being protected. This can be avoided using a mesh network.



## Agile Mesh Network

In a mesh network, each device acts as an independent router, allowing for multiple communication paths. The Agile solution is designed so that if one link is broken, all of the devices continue to communicate with each other without any loss of coverage. The EN54-25 standard for wireless fire detection requires that communication paths are not susceptible to interference from either inherent or external sources. The Agile multichannel frequency diversity ensures that this requirement is met, providing maximum levels of fire protection.

# Efficient Design, Configuration and Diagnostics

## 3-in-1 Agile IQ Software

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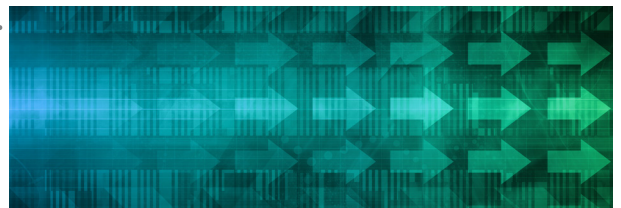
### 01. Design

The Agile IQ design software tool allows the user to design and simulate the quality of the wireless network from their office, without the need to be on site. Building maps can be easily imported via the software as images or CAD files. Networks can be easily tested to identify critical communication links which should be tested during a site survey.



### 02. Configuration

The AGILE IQ configuration software tool allows the device configuration to be performed either before or after the devices are installed in their final position. This provides the installer a greater degree of flexibility and can reduce commissioning time



#### Panel Integration

Agile wireless devices appear the same on the panel as their wired equivalents and can be integrated with the overall fire system – allowing for easy network interrogation via the panel or through the Agile IQ software.

#### Device Compatibility

The installer's job is further simplified as devices have the same look and feel as their wired equivalents and addresses are set using the familiar rotary switches. The gateway, the main communication interface between the panel and the wireless device, plugs into a standard detector base, allowing for easy and effective system extensions



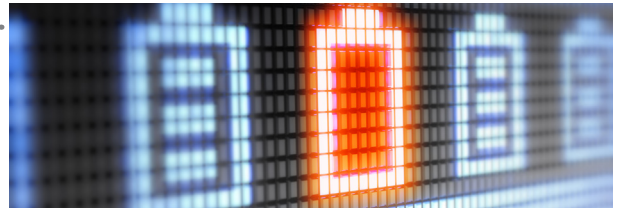
### 03. Diagnostics

The Agile IQ diagnostic software tool provides a real time picture of the network status without compromising the operation of the system.

The combination of the software and Agile USB dongle allows the user to effectively track performance and pinpoint any faults on site. With a few clicks a report containing the survey results can be generated. Troubleshooting is more accurate and problems are easier to resolve.

#### Smart Battery Service Prediction

Patented monitoring technology provides accurate battery service life prediction, reducing unplanned maintenance requirements. This eliminates the need to replace batteries on every inspection and allows proactive planning of battery replacement.



### Feature Summary & Benefits

- Wireless mesh network bi-directional communication technology - ensures full integration with existing systems
- Two communication paths to each wireless device - creates a more robust and reliable system
- 18RF channels at 868MHz - provides greater tolerance to interference
- 2 integrated antennas on each wireless fire device - easier positioning of devices
- Up to 400 m free air communication range - providing good coverage levels
- Average 5 year battery service life - reducing maintenance requirements
- Addresses set using rotary switches - reduced commissioning time
- Wired fire devices look and feel - easier installation and visual integration
- Patented battery service life prediction feature - more proactive maintenance
- Loop powered Gateway - reduced installation cost and time
- Up to 8 Gateways per loop
- Up to 32 Wireless devices per Gateway
- Agile IQ 3 in 1 software for easy design, configuration and diagnostics.



# Product Variants

## Fire Detectors

PN	DESCRIPTION
NRX-SMT3	Multi-Criteria: Photo-Thermal-IR Detector
NRX-OPT	Photo Detector
NRX-TFIX58	58°C Fixed Temperature Heat Detector
NRX-TDIFF	Rate of Rise Heat Detector

## Evacuation Devices

PN	DESCRIPTION
NRX-WCP	Waterproof Manual Call Point
NRX-IRK	Remote Indicator

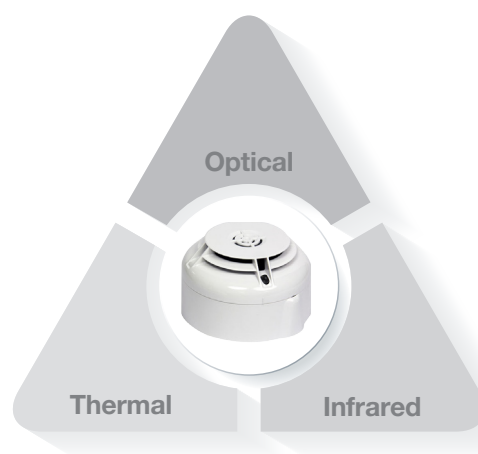
## Accessories

PN	DESCRIPTION
NRXI-GATE	Gateway, the translator between the radio network and the loop based Fire Detection system can handle up to 32 wireless devices
NRX-REP	Repeater, providing larger area coverage and more robust communication
B501RF	Base for Detectors or Repeaters

## Tools

PN	DESCRIPTION
NRX-USB	USB Wireless Dongle, for Wireless Fire System interfacing
Agile IQ	PC Based Software for site surveys, commissioning and diagnostics
POLE HWKIT	Carbon fiber Extendable Pole
CUP HWKIT	Cup / Removal Head
SOLOADAPT HWKIT	Adaptor between Solo Pole and Cup

For more information see Datasheets.



## Multi Criteria False Alarm Immunity

The wireless detector range includes the field proven Multi-criteria detector, which combines three separate sensing elements - Photo, Thermal and Infrared – acting as a single unit to deliver outstanding immunity to false alarms.

The three sensing elements are managed by advanced algorithms, which dynamically adjust the detection profile of the device in response to the sensing inputs, enabling it to adapt to environmental changes.

Based upon the sensor signals the algorithm continually changes its characteristics to detect fires faster with improved false alarm immunity.

## EN54-25 Compliance

Wireless systems must conform to the EN54-25 standard in three specific areas : Site attenuation, alarm signal integrity and interference immunity.

Agile mesh multi path technology ensures that communication messages are routed in the most efficient manner, ensuring maximum signal strength at each location. As a result there is always at least one communication link between each device and the gateway. Agile multichannel frequency diversity technology and a high number of channels adds further resilience to ensure that EN54-25 requirements are met.

