

# SWIFT™ Smart Wireless Integrated Fire Technology



## What is SWIFT?

SWIFT stands for: Smart Wireless Integrated Fire Technology. It is a Class A, commercial wireless system using a robust mesh network that integrates with existing fire systems.

## Why would I use SWIFT?

SWIFT sensors detect fire, just like their wired counterparts, while providing installation flexibility in a wireless format. SWIFT devices provide an opportunity for applications where it is costly (concrete walls/ceilings, buried wires), obtrusive (surface mount conduit), or possibly dangerous (asbestos) to use traditional wired devices. A SWIFT wireless system can use any combination of modules, smoke and/or heat detectors. In addition, both wired and wireless devices can be present on the same FACP providing an integrated wired-wireless solution for increased installation potential.

## How robust is the SWIFT system?

- The mesh network within the SWIFT system creates a child-parent relationship between the devices, so that each device has two parents providing a second path for communications on every device. If one device can no longer operate for any reason, then the rest of the devices can still directly communicate with each other or through one or more intermediate devices.
- SWIFT devices act as repeaters (unlike point to point systems) offering the freedom to extend the mesh when needed and providing inherent back-up against system disruption.
- The SWIFT system uses frequency hopping to prevent system interference, whether intentional or accidental.
- The devices comply with part 15 of the FCC rules, meaning that operation is subject to the following two conditions:
  1. The device may not cause harmful interference
  2. The device must accept any interference received, including interference that may cause undesired operation.
- Devices comply with UL268 standards, including 200 second polling and system response of devices within 10 seconds.

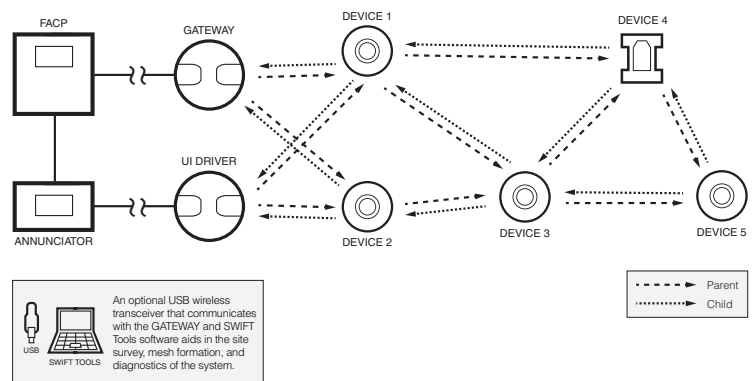
## What type of security does SWIFT have?

The SWIFT system uses an encryption key. Each message is encrypted to prevent miscommunication with other devices. As part of the set-up process, devices are assigned a “profile” which limits communication to a designated gateway.

## What is needed for a system?

The SWIFT system is designed to work with an intelligent FACP, a wireless gateway (VW-GATE), user interface (VW-DIS-D), annunciator (ANN-80-W), and the wireless devices (detectors and module). The W-USB is a wireless transmitter which aids in the site survey, mesh formation, and diagnostics of the system. However, it is an optional component.

SWIFT Mesh System



## Which panels does this work with?

E3 Series and S3 Series panels

## How many devices per gateway?

A system can have up to 50 devices per gateway, including the gateway itself and UI driver, in any combination of detectors and modules. However, each device uses one address on the panel, so address capacity cannot exceed the panel limits. In addition, the gateway uses 3 addresses and the UI driver uses 1 address.

## How many gateways in a system?

Up to 4 gateways can be within range of each other.

## What devices are available?

The initial launch will include a photo, Acclimate®, standard heat, rate-of-rise heat and monitor module. A 6-in base is sold separately.

## How are devices spaced?

Device spacing follows NFPA guidelines for the application. If signal strength is low, then an additional module or detector can be installed that will act as a repeater. Modules are typically preferred for use as repeaters, since detectors require additional maintenance per NFPA standards.

## What kind of batteries does a device use? How many?

The devices are listed to use either 4 Panasonic CR123A or 4 Duracell DL123A.

## What is the battery life?

Battery life is currently listed at 1 year. However, we are in the process of getting a 2-year listing.

## Will I know if the batteries are low?

Low battery levels on the wireless devices are displayed as a trouble on the annunciator. When the message "TROUBLE BATTERY LOW" is displayed, replace the battery in the device. This message is an indication that at least one week of battery life remains.

## What frequency does the system operate on?

902-928 MHz

## Will this work in Canada or other countries?

The SWIFT system is not currently listed outside of the US. International usage depends upon agency requirements and the permitted ISM band frequency range.

## When will the system be available?

Expected launch date is September 2014.

## What agency listings?

UL, FM, CSFM

## How do I know if it will work in my building?

The SWIFT system offers a Site Survey step, which allows an Installer to preview a site for wireless viability before they ever purchase a system using just a few devices that can be re-used from site to site.

## What are the steps to install a system?

The SWIFT system has two methods for installation: a quick install using magnets and LED indicators or a more detailed site installation using SWIFT Tools with the W-USB and a laptop.

The basic steps include:

- Set a unique profile in each device for the system
- Insert all 4 batteries
- Install the devices in their locations
- Allow the mesh network to establish

## How far can a device be from the gateway?

In an average environment the first device can be approximately 50 feet from the gateway. Various factors such as physical barriers and other radio transmissions can affect signal strength, so performing a site survey before installation is recommended. However, since the devices form a mesh network, they can create a chain of devices moving another 50 feet, and another and another ... as long as they continue to maintain two paths of communication.

## How much will a SWIFT device cost?

About 3-4 times as much as a comparable wired device. However, the installed cost may be lower in many applications since there is no need for wiring, especially in a difficult area.