WSK-PHOTO, WSK-PHOTO-T, WSK-HEAT-ROR, WSK-HEAT

SWIFT Wireless Detectors

SWIFT® wireless detectors are intelligent (addressable) detectors which provide secure, reliable communication to the Fire Alarm Control Panel (FACP) across a Class A mesh network. Wireless detectors create 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. In addition, both wired and wireless devices can be present on the same FACP providing an integrated wired-wireless solution for increased installation potential.

The SWIFT detection line includes a photoelectric, photo/thermal, standard fixed heat, and rate-of-rise heat detectors. The photoelectric detectors transmit a digital representation of smoke density through a wireless mesh to a gateway and on to a FACP. The photo/thermal detectors combine a photoelectric chamber and a 135°F fixed temperature heat detector. The fixed heat detector and rate-of-rise detectors utilize sensors designed for open area protection with 50 foot spacing capability as approved by UL 521.

All sensors offer addressable code wheels and two LEDs. The LEDs are controlled by the panels. Operation modes include red, green, and amber colors with various solid or blink patterns.

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, the rest of the devices can still communicate with each other, directly or through one or more intermediate devices.

The SWIFT system also engages frequency hopping to prevent system interference whether intentional or accidental.

The devices communicate across the mesh network through a gateway to the FACP. The FACP views the SWIFT wireless device and another addressable device on the system providing similar detection functions and outputs as a wired counterpart. In addition, both wired and wireless devices can be present on the same FACP to meet the needs of a given application. A SWIFT wireless system can use any combination of modules, smoke and heat detectors, pullstations, and A/V bases.

SWIFT Wireless Detector in B501W Base

FEATURES & BENEFITS

- Wireless installation
- Class A mesh network
- Addressable code wheels
- Commercial applications
- UL 268 listed
- Frequency hopping
- Bi-directional communications

Compatible Control Panels

- 6700
- 6808
- 6820
- 6820EVS

SWIFT Components and Ordering Information

- **WSK-PHOTO:** Intelligent, wireless photo detector. Ships with B501W base included. Requires (4) CR-123A batteries (included).

- **WSK-HEAT-ROR:** Intelligent wireless rate of rise (135°) heat detector. Ships with B501W base included. Requires (4) CR-123A batteries (included).

- **WSK-PHOTO-T:** Intelligent wireless photo/heat detector. Ships with B501W base included. Requires (4) CR-123A batteries (included).

- **WSK-HEAT**: Intelligent wireless fixed-temperature (135°) heat detector. Ships with B501W base included. Requires (4) CR-123A batteries (included).

- **WSK-WGI:** Wireless SWIFT Gateway - 1 SWIFT Gateway is required for each wireless mesh, and supports up to 49 SWIFT detectors or modules. Connects to the SLC loop of a compatible panel using SK protocol. Power may be supplied by the SLC circuit or via an optional 24VDC input.

Note: Use of the 24VDC input may be more convenient for service as it allows for powering down a gateway without shutting down an SLC loop.

- **WSK-MONITOR:** Wireless monitor module. Used to monitor devices with mechanical contact actuation. Includes a special cover with a built- in tamper magnet. Recommended for installation in a SMB500-WH box (ordered separately) rather than a metal backbox for best performance. Requires (4) CR-123A batteries (included).

- **WSK-RELAY:** Wireless relay module for use with the WSK-WGI wireless gateway. Includes a special cover with a built-in tamper magnet. Recommended for installation in an SMB500-WH box (ordered separately) rather than a metal backbox for best performance. Requires (4) CR-123A batteries (included).

- **WSK-PULL-DA:** Wireless addressable pullstation. Requires (4) CR-123A batteries (included).

- **WAV-CRL, WAV-CWL:** SWIFT Wireless Addressable A/V bases. Requires (8) CR-123A batteries (included). Requires a non-compact ceiling System Sensor® L-series notification device (ordered separately).

- **W-SYNC:** Wireless sync module. Requires (4) CR-123A batteries (included).

- **SMB500-WH:** Optional surface-mount backbox.

- **SWIFT Tools:** Programming and diagnostic utility. Free download from www.silentknight.com. For installation on a (typically laptop) PC running an approved version of Windows (See Minimum System Requirements for SWIFT Tools). Requires the W-USB radio/antenna dongle for communication with SWIFT Wireless devices.

- **W-USB:** Wireless USB radio/antenna dongle that plugs into the USB port of a PC running SWIFT Tools. The W-USB provides a communication link with SWIFT Wireless devices.

- **W-BATCART:** Wireless battery cartridge, 10-pack. For use with wireless pullstations and A/V bases.

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Technical Specifications

PHYSICAL / OPERATING

Height: 2.4 inches (61 mm) installed in B501W base

Diameter: 4.0 inches (102 mm) installed in B501W base

Device Weight (includes 4 batteries): 8.1 oz (230 g) installed in B501W base

Operating Temperature Range: Photo: 32°F - 120°F (0°C - 49°C); Photo/thermal with Heat: 32°F - 100°F (0°C - 38°C)

Air Velocity: Photo/thermal with Heat: 0 - 4,000 fpm (0 - 20 m/sec)

Operating Humidity Range: 10% - 93% non-condensing

Thermal Ratings: Fixed Temperature Set Point: 135°F (57°C); Rate-of-Rise Detection: 15°F/min (8.3°C/min)

ELECTRICAL

Radio Frequency Range: 902-928 MHz

BATTERY

Battery Type: 4 Panasonic® CR123A or 4 Duracell® DL 123A

Battery Life: 2 years

Battery Replacement: Upon BATTERY LOW or BAT LOW display and/or during annual maintenance

AGENCY LISTINGS AND APPROVALS

Each device complies with part 15 of the FCC rules meaning operation is subject to two conditions.

1) The device may not cause harmful interference and 2) The device must accept any interference received including interference that may cause undesired operation.

The listings and approvals below apply to the basic intelligent wireless detectors. In some cases, certain devices may not be listed by certain approval agencies or listing may be in process. Consult factory for latest listing status.

UL Listed: S6173 & S6228

CSFM: 7254-0559:0509, 7272-0559:0506

FM Approved

FCC ID: AUBWFSSD

STANDARDS AND CODES

The SWIFT Wireless Intelligent Detectors comply with the following UL Standards and with NFPA 72 Fire Alarm System requirements.

UL 864

UL 268

Honeywell

SILENT KNIGHT