

FIK-W-WGI SWIFT® Wireless Gateway

The SWIFT (Smart Wireless Integrated Fire Technology) Wireless System can be applied in many situations that are problematic for traditional wired devices. In cases where areas of a building are difficult or impossible to wire, visually sensitive, or have restricted access, SWIFT wireless sensors provide an efficient, reliable solution.

SWIFT Wireless devices communicate via a proprietary wireless mesh protocol to communicate with a Fike fire alarm system using a SWIFT wireless gateway. The SWIFT gateway connects to the SLC loop of an FCP-2100/ECS, FCP-300/ ECS, or FCP-75 panel using FIK protocol. New type IDs for wireless devices are supported that allow the FACP to display all events such as alarms and trouble indications and unique trouble conditions required for wireless devices. This capability eliminates the need for a supplementary annunciator for wireless event messages.

Wireless devices in a SWIFT network develop “parent-child” communication links with other devices in the mesh so that a message originating from a remote device “hops” to the closest parent device and then to successive parent devices until the message reaches the gateway. Alternate paths are also identified and supervised by the SWIFT protocol providing approved Class A wireless communication. If a device does not have an established communication path with adequate signal strength, an additional device such as a wireless module may be installed in between to act as a repeater.

FEATURES AND BENEFITS

- Wireless mesh technology (902 – 928 MHz frequency)
- Any wireless device can be added to act as a repeater
- Cascading-wave mesh operation verifies redundant communication paths
- Each SWIFT gateway system supports up to 50 devices: 1 wireless gateway and up to 49 devices
- Standard “code wheel” for setting the SLC address
- Up to 4 wireless networks can be installed with overlapping radio network coverage
- Site Survey feature allows for an evaluation of a site before the installation
- Wireless devices use (4) CR-123A lithium batteries
- Battery Life – UL listed for two years



A SWIFT gateway system supports up to 50 devices: One SWIFT gateway and up to 49 wireless detectors, modules, pull stations, and A/V bases. The maximum number of gateways on a system is limited by the number of available SLC addresses on the FACP or a maximum of four gateways within the common wireless range.

The SWIFT system has been designed to be installed using only typical hand tools and magnets. However, the SWIFT Tools PC utility provides many benefits that can enhance the process of performing a site evaluation (Site Survey), installing a system (Mesh Configuration), or extracting detailed information from the system (Diagnostics). The utility runs on a Windows® laptop and uses a USB radio antenna (W-USB) inserted into a USB slot to communicate with wireless devices within the PC range. Once devices have formed a mesh, SWIFT Tools can provide current information on all devices in the mesh as long as the PC is within range of the SWIFT Gateway.

The result is a fire system that combines both wired and wireless detection and presents all event information at the panel and/or network displays when used.

SWIFT TOOLS

SWIFT Tools is a Windows PC-based utility used for site evaluation, system configuration, and diagnostics. The SWIFT Tools program is used with the W-USB adapter to communicate with wireless devices that are not joined in a network or with one or more wireless gateways and all devices that have formed a network with each gateway. A graphic representation of the wireless network provides important system data effectively, including communication links, signal strength, battery voltage, and more.

Tool-less operation is supported, allowing you to perform a site evaluation, and system configuration and installation can be accomplished without using SWIFT Tools when necessary. Multicolored LEDs on SWIFT devices provide feedback for interactions. At any point, only one instance of SWIFT Tools can run on a laptop or PC.

SWIFT Tools has the following utilities:

- Site Survey
- Create Mesh Network
- Diagnostics

SWIFT Tools works in a wireless environment with the FIK-W-WGI and devices within a range of approximately 20 feet.

SWIFT Tools is designed for systems running Microsoft® Windows®.

MINIMUM SYSTEM REQUIREMENTS

Operating System: Windows 7 and Windows 8 (32 bit and 64 bit).

Hard Drive: 20 GB hard drive space with a minimum of 1GB free space on the hard disk.

RAM: Minimum 512MB RAM.

Processor speed: 1GHz minimum (2.4 GHz recommended) Processor, 512K Cache.

COMPATIBLE CONTROL PANELS

- FCP-75
- FCP-300 / FCP-300ECS
- FCP-2100 / FCP-2100ECS
- RFCP-2100

APPROVALS

The listings and approvals below apply to the FIK-W-WGI. The FIK-W-WGI complies with UL 864 and UL 268 standards.

- UL Listed
- Factory Mutual Approved
- CSFM
- FCC ID: AUBWFSPS

For exact certification listings, please reference the respective agency website.

SPECIFICATIONS

Physical	
Dimensions:	1 7/8" (4.5cm) high x 7 7/8" (20cm) diameter
Operating Temperature:	32°F to 120°F (0°C to 49°C)
Operating Humidity Range:	10% to 93% non-condensing
Electrical	
External Supply Electrical Ratings:	18V – 30VDC
SLC Electrical Ratings:	15V – 30VDC
Maximum Ambient Noise Level:	-85 dBm
Minimum Signal Strength Level for Trouble Support:	-55 dBm
Maximum RF Power Output:	+17 dBm
Radio Frequency:	902-928 Hz (lower ISM band)
Maximum Current:	40mA (24VDC); 24mA (SLC)

ORDERING INFORMATION

Part Number	Description
FIK-W-WGI	Wireless SWIFT Gateway. One 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 FIK-IDP protocol. Power may be supplied by the SLC circuit or via an optional 24 VDC input.*
FIK-W-PHOTO	Intelligent, wireless photo detector. Requires one B210W base for installation. Requires (4) CR-123A batteries (included).
FIK-W-ACCLIMATE	Intelligent, wireless Acclimate® heat and photo detector using combined heat and smoke sensor information and the ability to automatically adjust sensitivity based on ambient changes in the environment. Requires one B210W base for installation. Requires (4) CR-123A batteries (included).
FIK-W-HEAT-ROR	Intelligent wireless rate of rise (135°F) heat detector. Requires one B210W base for installation. It required (4) CR-123A batteries (included).
FIK-W-HEAT	Intelligent wireless fixed-temperature (135°F) heat detector. Requires one B210W base for installation. Requires (4) CR-123A batteries (included).
FIK-W-MONITOR	Wireless monitor module. It is used to monitor devices with mechanical contact actuation. Includes a special cover with a built-in tamper magnet. It is recommended for installation in a SMB500-WH box (ordered separately) rather than a metal backbox for best performance. Requires (4) CR-123A batteries (included).
FIK-W-RELAY	Wireless relay module for use with the FIK-W-WGI wireless gateway. Includes a special cover with a built-in tamper magnet. It is recommended for installation in a SMB500-WH box (ordered separately) rather than a metal backbox for best performance. Requires (4) CR-123A batteries (included).
FIK-W-PULL-DA	Wireless addressable pull station. Requires (4) CR-123A batteries (included).
WAV-CRL, WAV-CWL	SWIFT Wireless Addressable A/V bases. Required (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 back box.
B210W	Detector base used for wireless detectors. Includes a built-in magnet so that wireless devices can establish installed and tampered states.
SWIFT Tools	Programming and diagnostic utility.
W-USB	Wireless USB radio/antenna dongle that plugs into the USB port of a PC running SWIFT tools. Provides a communication link with the SWIFT Wireless devices.
W-BATCART	Wireless battery cartridge. 10-pack. For use with wireless pull stations and A/V bases.

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