



# SWIFT Firmware Suite 1.7

April 2018

SWIFT Firmware Suite 1.7 is now available. The package includes new features and improvements for our SWIFT products.

## OPTION BOARDS: WHAT'S NEW

### Data transfer via Wi-Fi

Uploading data, such as GPS or Indoor Location, from an option board to TRBOnet Enterprise/Plus via a Wi-Fi channel.

**NOTE: the radio must be equipped with the activated Wi-Fi module**

The radio can use a predefined Wi-Fi channel to upload stored data or online Location information or alerts to TRBOnet Server. Thanks to the higher capacity of a Wi-Fi connection compared to a radio channel, it takes significantly less time to transfer data to the Server. In addition to increased data transmission speed, Wi-Fi enables more GPS updates when the radio is connected to a Wi-Fi network. This Wi-Fi connection also prevents data congestion on the radio channels.

### Profiles

There are two configurable profiles, one for the radio channel, and the other for the Wi-Fi channel. The Option Board's embedded logic can switch between them. The profile tells the radio how often it should send location data or alerts to TRBOnet Server. Wi-Fi and radio profiles can contain different settings (e.g., the Wi-Fi profile may generate more frequent GPS updates than the radio profile).

### New triggers for the built-in logic

#### Wi-Fi Connected/Disconnected

The radio is able to perform one or several actions if it is connected to or disconnected from a predefined Wi-Fi network.

#### Use Case

A campus security officer performs public safety patrol rounds within a radio coverage area; his radio with an option board feeds GPS data to TRBOnet every two minutes according to the radio channel profile. As soon as he enters a campus Wi-Fi coverage area, the option board automatically switches to the Wi-Fi profile and starts sending GPS location at a faster update rate, e.g., every 10 seconds. When he leaves the Wi-Fi area, the option board switches back to the radio channel profile.

### Battery status

The radio can report its battery status each time it sends a data packet to TRBOnet Server. If the radio is equipped with an Impres battery, the dispatcher will be able to see the percentage remaining battery level. Otherwise, the radio will send an alert in the case of a low battery level.

### Rollover Detection

A new safety feature allowing the radio user to set a default vertical axis orientation for a mobile radio installed in a vehicle. If the angle between the axis and the actual radio orientation exceeds the preset threshold, an alarm is triggered.

### iBeacons

Flexible configuration for iBeacon-based tracking. The software enables fast iBeacon detection and immediate reporting to TRBOnet Server. The option board supports impolite channel access for location notification.

### Clock Synchronization

During the first data transmission, the option board initiates clock synchronization and uses the server time for data logs.



## SWIFT IP GATEWAYS

### Support for the new A100 Swift IP Gateway

#### High latency

This gateways support latency up to 1800ms. Requires TRBOnet Enterprise/Plus 5.2.5.



## MIC ADAPTER M002

#### Minor fixes