SideBridge Module Bluetooth/WiFi Connection Module



General Description

The SideBridge module provides a secure Bluetooth or Wi-Fi connection between a radio and a smartphone. The rugged module attaches directly to the radio and expands Personal Area Network (PAN) communications without the need for any wires. SideBridge connects the wealth of applications available on a standard smartphone or tablet including images, messaging and video – to the radio network.

The SideBridge module is a low cost, easy to use solution enabling superior communications to tactical radio users.

SideBridge is available in various models to fit a variety of tactical radios.

SideBridge LCD

When connected to the Rifleman Radio (PRC-154/A), SideBridge LCD reads and displays radio status and configuration data such as the preset number, number of network nodes, battery level, GPS position, and volume level. The SideBridge LCD display eliminates the need to press a key or combination of keys to get the audible responses from the Rifleman Radio. All of the critical radio communication information is displayed on a 2.4" color touchscreen.

SideBridge LCD offers an optional wireless and wired data connection to the radio. Users have the option to connect a smartphone over Bluetooth, Wi-Fi or on a rugged, wired USB and power connection.

SideBridge RAP

SideBridge RAP is designed to provide a 'Secret and Below' wireless data connection from the PRC-117G manpack radio. It's ideal for vehicle and aircraft communications where multiple users with smartphones or tablets can connect securely to the radio network without the need for any wires.



Simplified Network Diagram





SideBridge LCD module connected to a Rifleman PRC-154/A tactical radio, reading and displaying configuration data

SideBridge RAP module connected to a PRC-117G manpack radio, providing a wireless data connection from the radio

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SideBridge Active Sensor

SideBridge connects active sensors including body-worn sensors to the tactical radio network. MedWatch is an injury sensing panel that can detect a piercing incident from a bullet, knife, or shrapnel and send an automated emergency notification through SideBridge to other radio nodes.



SideBridge module connected to a tactical radio communicating with an active sensor and transmitting injury alerts to medics within the network

SideBridge Features and Benefits

- Wireless connectivity between a smartphone or other devices and a radio no external cables required
- Secure IP communications designed to FIPS-140-2 or 'Secret and Below'
- Access to any smartphone application for secure wireless transfer of intelligence, surveillance, and reconnaissance data to/from a radio network
- Multiple users can access the data connection from one radio
- Rugged enclosure with external USB port for optional, wired link
- Operating range of up to 30 meters
- Adaptable to a variety of tactical radio models
- Capable of supporting Bluetooth, Wi-Fi, GPS, and other functions
- SideBridge connects to BlueLink, our Android app that provides situational awareness, network status, and position location information for dismounted troops
- Safe and effective decision-making through the BlueLink management and monitoring of radio battery, radio node distances, node neighbors, and location-based data



SideBridge module connected to a PRC-152A tactical radio.
The BlueLink Android app provides situational awareness

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Technical data

Communications	Bluetooth	WiFi
Wireless standard	Bluetooth v4.0 and Low Energy (LE)	IEEE 802.11 b/g/n
Frequency range	2.40—2.48 GHz	2.4 GHz
Maximum Data Rate	2 Mbps	Up to 65 Mbps
Communication Range	30m	
Encryption	IPSEC: AES-256 (FIPS-140-2 certifiable) Secret and Below	
Wired Ports	External USB—host or device	
Radio Connections	USB, Serial, Ethernet, Input Power	



SideBridge module connected to a tactical radio and communicating via Bluetooth to a smart phone and tablet operating the BlueLink app

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BlueLink Tactical Android Application

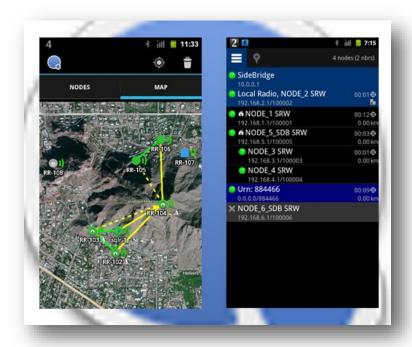


General Description

BlueLink provides situational awareness for dismounted troops from the local radio user's perspective. It displays the status of the SRW network, connected radio nodes, and map of all node locations. BlueLink is currently available for the Rifleman Radio (PRC-154/A) and operates on Android-based devices. It reads the radio MIB as its source of data — it does not add any traffic to the radio network.

BlueLink Features and Benefits

- Displays status of smartphone/radio connectivity and battery level
- The neighbor table displays the list of radio ID's/URN's within and outside the network, indicating island heads, adjacent nodes and those that are hopping through other nodes
- Unique radio names and regiment information can be applied so that the network nodes are easily identifiable
- The MGRS coordinates of the local radio and PLI status and distance to all other radios is listed in the table
- Team leaders can make safe and effective decisions through the management and monitoring of the SRW communication network. Troops can be strategically positioned to keep all radio nodes within range of the network.
- Blue force tracking displays map tiles and radio locations for all nodes within the network. Common mapping features such as zoom and pan are supported.



BlueLink offers a map view and a list view of the network

DataSoft develops products for Information Technology and Wireless Communication Systems. Our products are used for intrusion protection, R&D, rapid prototyping, waveform development & porting, technology demonstration, SCA API compliance verification, test automation, and system integration. Our technology helps customers reduce development costs and improve time-to-market.

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