

gotenna

C SDK Info and FAQ

The goTenna software development kit (SDK) allows you to send and receive messages from your custom app via goTenna hardware.

SDK Software Platforms Supported

- The goTenna Pro SDK for Aspen Grove 1.1+ is written in C. Platforms supported include:
 - Windows & Linux - Use the C SDK directly
 - Android - Kotlin/Java displays C SDK APIs
 - iOS - Swift wrapper displays C SDK APIs or use the C SDK directly

SDK Hardware Platforms Supported

- Embedded module:
 - Interface: SPI
 - Requires an SPI microcontroller i.e. Raspberry Pi
- goTenna Pro, goTenna Pro X, goTenna Pro X2:
 - Interface: BLE 4.0+ and BLE 5.0 or Micro USB 2.0

goTenna Protocol and Firmware Versions Supported

- Aspen Grove Protocol
 - AG 1.1: Firmware 2.0.0-2.0.21
 - AG 1.2: Firmware 3.0.0-3.X.X

goTenna Specifications

- Data packet size: Up to 235 bytes per transmission
- Occupied Bandwidth: Up to 11.8 kHz (25 kHz channels)
- Data rate: Up to 19.2 kbps
- Mesh networking protocol: Aspen Grove 1.1 and 1.2
- Frequencies: 142-175 MHz or 445-480 MHz

FAQ:

1. What commands can I run with the C SDK and what do these commands do?
 - a. Echo - Makes the radio blink
 - b. Send message - Sends 1-1, group, or broadcast messages (before running the command, the user needs to specify the message type)
 - c. Get system info - Gets the radio's firmware version, battery level, serial number, temperature, etc.
 - d. Set GID - Gets the goTenna's goTenna ID
 - e. Set frequency set - Sets the radio's frequency set, bandwidth, and power
 - f. Get notification - Get notification types from the radio
 - g. Get first stored message - Gets the last message stored on the radio
 - h. Delete stored messages - Deletes messages stored on the radio
 - i. Set token - Sets the goTenna's token and stores application ID
 - j. Change mode - Toggle relay mode, listen-only mode, or default mode
 - k. Toggle protocols - Choose the specific AG protocol to use per transmission
2. Can I integrate goTenna with third party radios using the C SDK?
 - a. No. Without goTenna Pro hardware, a third party radio cannot be a part of goTenna's mesh network. The goTenna software development kit (SDK) allows you to send and receive messages from your custom app via goTenna hardware.
3. Can I integrate goTenna with other networks?
 - a. Yes. You can customize your software solution to bridge goTenna data with other networks. The goTenna C SDK is used to send and receive messages via the goTenna device.
4. Can I increase the data packet size to send more data?
 - a. goTenna specializes in small bandwidth data transmissions. Our data packet limit is 235 bytes. It is possible to split a larger message into multiple data packets using a custom app and to send those messages over goTenna using our SDK. However, we have found that most users can trim or compress their data to the essentials to maximize network efficiency.
5. How do I get a token to use the SDK?
 - a. Contact partnerships@gotenna.com for more information

goTenna

prosupport@gotenna.com
gotennapro.com

10.06.22