SKU17022,17023
SiK Telemetry Radio V3
Quick Start Guide

Overview

This Holybro SiK Telemetry Radio is a small, light and inexpensive open source radio platform that typically allows ranges of better than 300m "out of the box" (the range can be extended to several kilometres with the use of a patch antenna on the ground).

This radio is plug-n-play all Pixhawk Standard and other Flight Controller, providing the easiest ways to setup a telemetry connection between your Autopilot and a ground station. It uses open source firmware which has been specially designed to work well with MAVLink packets and to be integrated with the Mission Planner, Ardupilot, QGroundControl, PX4 Autopilot.

The radios can be either 915Mhz or 433Mhz and you should purchase the model which is appropriate for your country/region.

Note:

This radio does not support firmware upload via Mission Planner 1.3.75 or order. Please use Mission Planner 1.3.75.1 or newer if firmware upload is needed.

Features

- *Open-source SIK firmware*
- Plug-n-play for Pixhawk Standard Flight Controller
- Easiest way to connect your Autopilot and Ground Station
- Interchangeable air and ground radio
- Micro-USB port (Type-C Adapter Cable Included)
- 6-position JST-GH connector

Specification

- 100 mW maximum output power (adjustable) -117 dBm receive sensitivity
- RP-SMA connector
- 2-way full-duplex communication through adaptive TDM UART interface
- Transparent serial link
- MAVLink protocol framing
- Frequency Hopping Spread Spectrum (FHSS) Configurable duty cycle
- Error correction corrects up to 25% of bit errors Open-source SIK firmware
- Configurable through Mission Planner & APM Planner
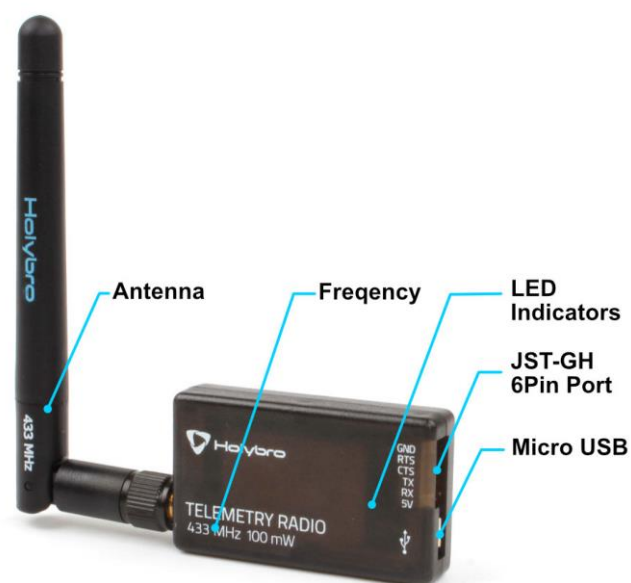- FT230X is a USB to BASIC UART IC

Dimensions

- 28 x 53 x 10.7mm (without antenna)

Electrical Data

- Supply voltage: 5V DC (from USB or JST-GH)
- Transmit current: 100 mA at 20dBm
- Receive current: 25 mA
- Serial interface: 3.3 V UART

Product Description

LEDs Indicators Status

The radios have 2 status LEDs, one red and one green.
The meanings of the different LED states are:

Green LED blinking - searching for another radio
Green LED solid - link is established with another radio
Red LED flashing - transmitting data
Red LED solid - in firmware update mode

Connecting to Pixhawk Standard Flight Controller

Use the 6 pin JST-GH connector that come with the radio to connect the radio to your flight controller's "Telem 1" ("Telem 2" can also be used but the default recommendation is "Telem1").

Connecting to a PC or Ground Station

Connecting the radio to your Windows PC or Ground Station is as simple as connecting the micro/type-C USB cable (both included with the radio) to your PC/Ground Station.

The necessary drivers should be installed automatically and the radio will appear as a new "USB Serial Port" in the Windows Device Manager under Ports (COM & LPT). The Mission Planner's COM Port selection drop-down should also contain the same new COM port.

Package Included

Radio modules with antennas *2
Micro-USB to USB-A cable *1
Micro-USB to Micro-USB OTG adapter cable *1
Micro USB to Type C Adapter
JST-GH-6P to JST-GH-6P cable *1 (for Pixhawk Standard FC)
JST-GH-6P to Molex DF13 6P (for Pix32, Pixhawk 2.4.6, etc.)

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