

Telemetry Radio V3

Quick Start Guide



Overview

A Holybro 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). The radio uses open source firmware which has been specially designed to work well with MAVLink packets and to be integrated with the Mission Planner, Copter, Rover and Plane.

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



SPECIFICATIONS

Processing

100 mW maximum output power (adjustable) -117 dBm receive sensitivity

Open-source SIK firmware

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

Features

Interchangeable air and ground modules 915 or 433 mHz

Micro-USB port

4-position JST-GH connector

Dimensions

26 x 53 x 10.7mm (without antenna)

Power

Supply voltage: 5V DC (from USB or JST-GH)

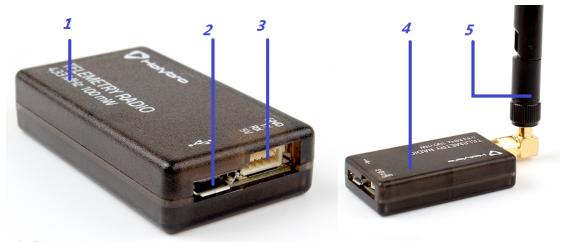
Transmit current: 100 mA at 20dBm

Receive current: 25 mA

Serial interface: 3.3 V UART



Port Description



- 1 Frequency
- 2 Micro-USB port
- 3 JST-GH 4-position port
- 4 LED indicator
- 5 2 dbi Antena

Status LEDs

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

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



Connect to Pixhawk

Use the 4 pin JST-GH connector that should have come with the radio to connect the radio to your Pixhawk's "Telem 1" ("Telem 2" can also be used but the default recommendation is "Telem1").

Connect to a PC

Connecting the radio to your Windows PC is as simple as connecting the micro USB cable (which should have been included with the radio) to your PC. 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.

Connect to TABLET

Connect the ground module to your tablet using the Android adapter cable. Connect the colored end to the tablet and the black end to the radio.



Holybro is a registered trademark of Holybro, registered in the U.S. and other countries. ©Copyright 2018 Holybro. All Rights Reserved.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for RF Development Tools category:

Click to view products by SparkFun manufacturer:

Other Similar products are found below:

MAAM-011117 MAAP-015036-DIEEV2 EV1HMC1113LP5 EV1HMC6146BLC5A EV1HMC637ALP5 EVAL-ADG919EBZ ADL5363EVALZ LMV228SDEVAL SKYA21001-EVB SMP1331-085-EVB EV1HMC618ALP3 EVAL01-HMC1041LC4 MAAL-011111-000SMB
MAAM-009633-001SMB 107712-HMC369LP3 107780-HMC322ALP4 SP000416870 EV1HMC470ALP3 EV1HMC520ALC4
EV1HMC244AG16 MAX2614EVKIT# 124694-HMC742ALP5 SC20ASATEA-8GB-STD MAX2837EVKIT+ MAX2612EVKIT#
MAX2692EVKIT# SKY12343-364LF-EVB 108703-HMC452QS16G EV1HMC863ALC4 EV1HMC427ALP3E 119197-HMC658LP2
EV1HMC647ALP6 ADL5725-EVALZ 106815-HMC441LM1 EV1HMC1018ALP4 UXN14M9PE MAX2016EVKIT EV1HMC939ALP4
MAX2410EVKIT MAX2204EVKIT+ EV1HMC8073LP3D SIMSA868-DKL SIMSA868C-DKL SKY65806-636EK1 SKY68020-11EK1
SKY67159-396EK1 SKY66181-11-EK1 SKY65804-696EK1 SKY13396-397LF-EVB SKY13380-350LF-EVB