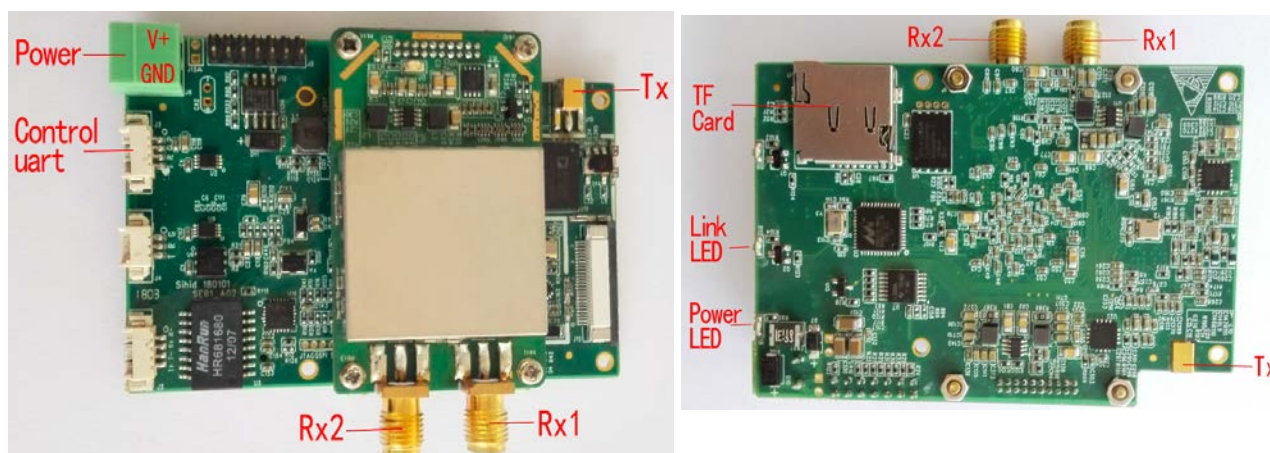


## Rep1 COFDM Relay Module



Sihid Rep1 relay module accepts COFDM signals from two antennas (can just use one too) and demodulates it, then re-modulates and transmits. The relay module can find and lock automatically to the incoming transmission quickly according to the pre-set frequency and bandwidth.

- COFDM demodulation and re-modulation;
- Stable signal transfer in NLOS and high speed moving;
- Adjustable working frequency, band width, transmission power, etc.

### Specification:

#### IO

RF input	Two SMA female
RF output	MMCX female
TTL 3.3V control uart	4PIN PH1.25mm Connector
Power in	2PIN PH2.54mm phenix Connector
TF-card	For firmware update
Power led	red constant light when device is normal powered
Link led	green blinks on transmitting the received data

#### Demodulation and Modulation

Modulation Formats	COFDM(DVB-T)
Carriers	2K
Bandwidth	Configurable from 1MHz to 8MHz, step by 1KHz
FEC	1/2, 2/3, 3/4, 5/6, 7/8
Guard interval	1/32, 1/16, 1/8, 1/4
Constellation	QPSK, 16QAM, 64QAM

#### RF Received

Frequency Bands	160MHz~860MHz
Tuning Step size	1KHz
Sensitivity	-97 ± 1dBm (BW=8MHz, QPSK, CR=2/3, GI=1/16) for one channel and add 3dBm for two channel

#### RF Transmitted

Frequency Bands	200MHz~2300MHz (other bands can be supported with special manufacturing)
Tuning Step size	1KHz
Transmission power	Configurable, maximum -5dBm (subject to frequency)

### Monitoring and control

Comprehensive setup with Sihid Config Panel or other device via control uart. With Sihid SconA or SconC config panel, the following parameters can be setup:

- ✓ Received frequency(f1) and bandwidth(b1)
- ✓ Transmitted frequency(f2), bandwidth(b2), fec, guard interval, constellation and transmission power

### Temperature range

Full specification: 0° to +70°C Ambient

Storage: -40° to +80°C

### Dimensions

73x51x15mm (not including connectors out of the board)

### Power requirements

Input range: 7~24VDC

Power consumption: <250mA@12V

### Application Block:

