

User Manual

The 40MHz crystal oscillator drives the base of X1.

The modulation provided by IC RTL8720DN(U2). The output of has the matching network consisting of F1 and M3 that limit the harmonic content and effect the proper coupling of the antenna to the output stage.

Antenna, Ground and Power Source

The antenna consists of a 2.4GHz and 5.0GHz Meander line PCB antenna.

2.4GHz Antenna gain: 5.53 dBi.

5.0GHz Antenna gain: 8.1dBi.

There is no external ground connection. The ground is only that of the printed circuit board.

Electric current is supplied by Input100-240V a. c. 50/60Hz 1000mA;

Output: 5Vd.c. 2A.

Operation Descriptions

The transmitter operating at 2400-2483.5MHz band and 5150-5850MHz . The transmitter is powered by 3.3Vdc and the transmitting frequency is crystal controlled. The operation is achieved by different combinations of form pulse modulating signal on the 2400MHz and 5150MHz carrier frequency.

Remarks:

The EUT continues to transmit while power on. Modulation by IC; and type is BPSK,QPSK,16-QAM,64-QAM modulation. Bluetooth Version is BLE5.0.

FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: The user is cautioned that changes or modifications not expressly approved by the party

responsible for compliance could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.

The device must be professionally installed

The intended use is generally not for the general public. It is generally for industry/commercial use.

The connector is within the transmitter enclosure and can only be accessed by disassembly of the transmitter that is not normally required. the user has no access to the connector.

Installation must be controlled. Installation requires special training

This module has been assessed against the following FCC rule parts: CFR 47 FCC Part 15 C (15.247, DTS) and CFR 47 FCC Part 15 E (NII). It is applicable to the modular transmitter

This radio transmitter 2AXGW-SENSEF2 has been approved by Federal Communications Commission to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
1	2412-2462 2402-2480	pcb trace antenna	5.53

Antenna No.	Frequency (MHz)	Antenna Type	Max Antenna Gain (dBi)
1	5150-5250 MHz	pcb trace antenna	5.38

	5725-5850 MHz	pcb trace antenna	8.10
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Notice to OEM integrator

Must use the device only in host devices that meet the FCC RF exposure category of mobile, which means the device is installed and used at distances of at least 20cm from persons.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

The end user manual shall include FCC Part 15 compliance statements related to the transmitter as show in this manual (FCC Statement).

Host manufacturer is responsible for compliance of the host system with module installed with all other applicable requirements for the system such as Part 15 B.

The devices must be installed and used in strict accordance with the manufacturer's instruction as described in the user documentation that comes with the product.

Host manufacturer is strongly recommended to confirm compliance with FCC requirements for the transmitter when the module is installed in the host.

Must have on the host device a label showing Contains FCC ID: 2AXGW-SENSEF2 The use condition limitations extend to professional users, then instructions must state that this information also extends to the host manufacturer's instruction manual.

This module is stand-alone modular. If the end product will involve the Multiple simultaneously transmitting condition or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer have to consult with module manufacturer for the installation method in end system.