## 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 that is received, including any interference that may cause undesired operation.

FCC ID: VWXIWTZ-M6-001

#### **WARNING:**

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### **FCC USER INFORMATION:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, used and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will occur in particular installation. If this equipment does cause harmful interference to radio or television reception, which and be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna,
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.
- Consult the dealer or an experienced radio / TV technician for help

#### **RF EXPOSURE:**

In accordance with FCC requirements of human exposure to radiofrequency fields, the radiating element shall be installed such that a minimum separation distance of 20cm shall be maintained from the user and/or general population.

### PRODUCT INTRODUCTION

IWTZ-M6-001 is a standard ZigBee protocol wireless communication module, using Freescale ZigBee MC13213 plus RF PA circuit design. ZigBee technology is a wireless communication technology some where between an RFID and Bluetooth technology. Its major applications are short range data, wireless voice communications,. Depending on applications, ZigBee can be used in point-to-point, one-to- many, and many- to -many, mesh type of network.

# **Applications**

- 1. Water, electricity, gas automatic wireless gauge
- 2. Intelligent traffic, natural gas production remote control system
- 3. Building lighting, ventilation, security system control
- 4. Mine field tunnel environment monitoring system
- 5. Industrial production, logistic management
- 6. Medical equipment, health monitoring
- 7. Home appliance, intelligent home management and security systems
- 8. Model planes, toys, remote control, wireless mouse keyboards
- 9. Automobile electronic wireless control

#### **Features**

- 1. Small footprint (43mm×27mm), easy to adopt to different system designs
- 2. Long transmission distance, high interference immunity, high communication quality
- 3. Network capable, (mesh & star)
- 4. High receiving sensitivity, adjustable output power
- 5. Low power consumption

### Product specifications

Frequency: 2.405—2.480 GHz

Communication protocol: IEEE 802.15.4 ZigBee

Data rate: 250KBps

Data encryption: 128-bit AES

Error check: CRC-16/32

Communication method: CSMA-CA TD CSMA-CA Power: 10-19dBm adjustable

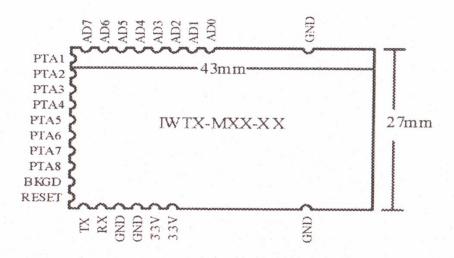
Sensitivity: -110dBm

Distance: 600m (internal antenna), 1000m (external antenna)

Data I/O: UART (USB-A or RS-232)

I/O's: 16 I/O
Power Supply: 2.75V-3.3V
Working Voltage: <100mA

Connection Diagram:





Remark: Specification is just for general introduction and description of the product feature., IWT reserves the right to change the content without prior notice