

Image transmission Module M240958L

Operation Instruction

Version 1.0

1. Overview

M240958L is an image transmission module designed and manufactured by Autel Robotics LTD., CO.

The module is developed based on the 4G TD LTE technology platform and is suitable for point-to-point image and data bidirectional transmission. The module provides the function of automatically and manually selecting frequency bands, and has super anti-interference ability.

2. Characteristics

Single power supply, wide voltage input

USB+2 serial ports

Support four-frequency automatic selection, adaptive frequency point

Support wireless upgrade

Automatic network repair

Encrypted transmission

Full industrial grade components to meet the harsh working environment

Product size is small and easy to integrate Specification

Parameter	Description	Comments
System	Linux/Android	
MCU	LC1881	
eMMC/Flash	16GB/16Gb	Can support 64GB eMMC
Frequency	900MHz: 902-928MHz 2.4GHz: 2400-2483.5MHz 5.2GHz: 5150-5250MHz 5.8GHz: 5725-5850MHz	1. Work in one frequency band and frequency at the same time. 2. Can manually set frequency point.
Bandwidth	1.4MHz/10MHz/20MHz	
Output Power	FCC CE	FCC: $\leq 30\text{dBm}$ CE: $\leq 20\text{dBm}$
Connector/Definition	BM15B-GHS-TB: 12VDC USB2.0 UARTx2, Baud rate: 115200 GPIOx2	GPIO customizable
Antenna Port	IPEX one gen.	Support less than 5dBi antenna
DC Power	9-26V	12V typ.
Power Consumption	$\leq 8\text{W}@FCC$ $\leq 6\text{W}@CE$	
Work Temperature	$-30^{\circ}\text{C}\sim 85^{\circ}\text{C}$	
Humidity	99% No condensation	

Storage Temperature	-40℃~85℃	
---------------------	----------	--

3. External dimension





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.

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

Note: 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, uses and can radiate 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 not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can 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 connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This modular complies with FCC RF radiation exposure limits set forth for an

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

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: 2AGNTMTBL or Contains FCC ID: 2AGNTMTBL"

The host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. The final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed. The final host integrator must ensure there is no instruction provided in the user manual or customer documentation indicating how to install or remove the transmitter module except such device has implemented two-ways authentication between module and the host system.

When the module is installed inside another device, the user manual of the host must contain below warning statements;

1. 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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

Note: 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, uses and can radiate 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 not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can 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 connected.

—Consult the dealer or an experienced radio/TV technician for help

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 your body.

900M

ANT 1:

Dongguan YiJia Electronics Communication Technology Co.,Ltd./DF5_trif_F
906.0MHz~924.0MHz : 1.4dBi(declare by Applicant)

ANT 2:

Dongguan YiJia Electronics Communication Technology Co.,Ltd./ DF5_trif_B
906.0MHz~924.0MHz : 1.0dBi(declare by Applicant)

2.4G

ANT 1:

Dongguan YiJia Electronics Communication Technology Co.,Ltd./ DF5_trif_F
2403.5MHz~2473.5MHz: 0.5dBi(declare by Applicant)

ANT 2:

Dongguan YiJia Electronics Communication Technology Co.,Ltd./ DF5_trif_B
2403.5MHz~2473.5MHz: 1.3dBi(declare by Applicant)

5.2GHz

ANT 1:

Dongguan YiJia Electronics Communication Technology Co.,Ltd./ DF5_trif_F
5.2GHz:-4.3dBi(declare by Applicant)

ANT 2:

Dongguan YiJia Electronics Communication Technology Co.,Ltd./ DF5_trif_B
5.2GHz: -2.1dBi(declare by Applicant)

5.8GHz

ANT 1:

Dongguan YiJia Electronics Communication Technology Co.,Ltd./ DF5_trif_F
5.8GHz:-1.8dBi(declare by Applicant)

ANT 2:

Dongguan YiJia Electronics Communication Technology Co.,Ltd./ DF5_trif_B
5.8GHz: 0dBi(declare by Applicant)