

# **S600 User Manual**

## **FCC Regulations:**

●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.

●This device 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 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 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.

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

●The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

## **► RF Exposure Information**

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

●This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

## **I. Functions and Usage**

The S600 development Kit is used to debug the Franklin Wireless M600 series module. It is designed by an auxiliary board with Franklin Wireless M600 series module embedded. When the S600 is used, you can connect the module to a PC through a USB cable. When the module works normally, the debugging functions can be implemented. The S600 provides multiple interfaces, such as the Mini-USB port, DC power jack, RF connectors.

The S600 can be used to test the performance of the module. Both the wired connection test (connect the module to the each equipment) and the wireless connection test (connect the module to the antennas) can be implemented. The signal points can also be tested when you maintain and repair the module.

## II. Structure

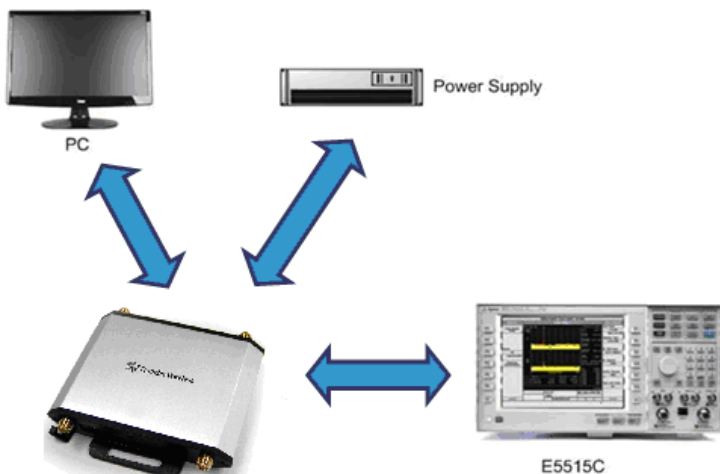
**Figure-1 Structure of the S600**



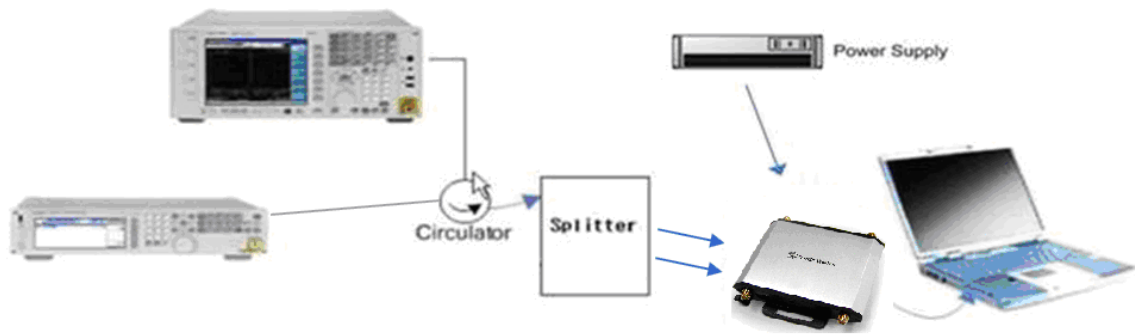
## III. Method for Connecting the S600

1. Diagram of connecting the S600 to the equipment.

**Figure-2. Configuration for Adjustment and Test of CDMA, PCS mode**



**Figure-3. Configuration for Adjustment and Test of WIMAX mode**



## 2. Diagram of connecting the S600 and the antenna

**Figure-4. Diagram of connecting the module and the antenna**



**Table-1. Port definition of RF connectors**

Port definition	1	2	3	4
S600	WiMAX Main	CDMA Aux+GPS	WiMAX Aux	CDMA Main

**Figure -5 Port definition of RF connectors**



#### IV. Installation of the S600

- Connect the devices and set up the test environment according to Figure-2 or Figure-3. Then connect the S600 to the PC through a Micro-USB to Type A USB cable..
- When performing the wired connection test, connect the E5515C to the RF interface of the S600.. (For the connection method, see Figure-2 and Figure-3)
- When performing the wireless connection test, connect the antennas to the RF interface of the S600 directly. (For the connection method, see Figure-4.)

#### V. LED indication of the S600

Green: H/W power indication

Blue: Indicate the state of the card.(M600)

#### VI. Material List

Model	Device	USB Y-Cable	CDMA Main antenna	CDMA Aux/GPS antenna	WiMAX antenna
S600	1 EA	1 EA	1 EA	1 EA	2 EA