# Verizon LTE UE Tester Model: INTTP202134134

# **Quick Installation Guide**



Manufacture By:

Sercomm Corporation

8F, No. 3-1, YuanQu Street, Nankang, Taipei 115, Taiwan, R.O.C.

CHAPTER 1 INTRODUCTION	.1
Package Contents	.1
Key Feature	
LEDs	
Rear Panel	.3
CHAPTER 2 INITIAL INSTALLATION	.4
Procedure	.4
CHAPTER 3 SPECIFICATIONS	.5
General Specification	.5
RF Characteristics	
Regulatory Requirements	.6
Safety Information	
Device Surface Cleaning	
Accessories	

# Chapter 1 Introduction



#### This Chapter provides an overview of the device's features and capabilities.

The LTE INTTP202134134 series UE Tester is a Desktop Small Cell LTE Device Tester handles multiple scenarios, running different protocols simultaneously, and provides a complete, independent solution.

#### Package Contents

The following items should be included:

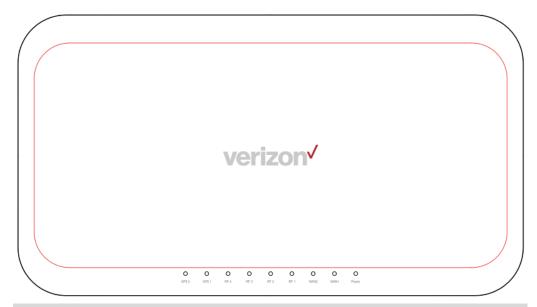


If any of the above items are damaged or missing, please contact your dealer immediately.

#### **Key Feature**

- Designed for indoor lab test equipment deployment
- Dual Intel T3100 chipset
- Total 2GB RAM (1 GB RAM per each T3100)
- Support up to 4 concurrent LTE bands
- Support 4 Gigabit Ethernet Ports with RJ45 connector
- Support 8 External RF antenna with Transmission output at 17dBm per RF ports
- Support 2 External RF GPS antenna

## LEDs



#### **Top-mounted LED**

POWER (Red)	On - Power On/Normal Operation	
	Off - Power off	
WAN1 (Red/Green)	On Green - CPU1 LAN active	
	On Red - CPU1 LAN inactive	
WAN2 (Red/Green)	On Green – CPU2 LAN active	
	On Red – CPU2 LAN inactive	
RF1 (Red/Green)	On Green – Band 13 in service	
	On Red – Band 13 RF not in service	
RF2 (Red/Green)	On Green – Band 4 in service	
	On Red – Band 4 RF not in service	
RF3 (Red/Green)	On Green – Band 13 in service	
	On Red – Band 13 RF not in service	
RF4 (Red/Green)	On Green – Band 4 in service	
	On Red – Band 4 RF not in service	
GPS1 (Red/Green)	On Green – GPS in service	
	On Red – GPS RF not in service	
GPS2 (Red/Green)	On Green – GPS in service	
	On Red – GPS RF not in service	

# **Rear Panel**



Power	Input: 12 Vdc, 9A, Power Jack to Power Adaptor		
Reset 1	This button is used to reset or restore to factory default for CPU1		
Reset 2	This button is used to reset or restore to factory default for CPU1		
Ethernet	Use standard LAN cable (RJ45 connectors) to connect to backhaul /broadband router		
RF1 Band 4	SMA connection for Band 4 External Antennas		
RF2 Band 13	SMA connection for Band 13 External Antennas		
RF3 Band 4	SMA connection for Band 4 External Antennas		
RF4 Band 13	SMA connection for Band 13 External Antennas		
GPS1	SMA connection for GPS1 External Antennas		
GPS2	SMA connection for GPS2 External Antennas		

# Chapter 2 Initial Installation



This Chapter covers the software installation of the device.

#### **Procedure**

1. External Antenna

Connect the external antennas (total 8 included in the package) to antenna connector ports.

2. Power Up

Connect the supplied power adapter to the UE Tester. Use only the power adapter provided. Using a different one may cause hardware damage.

3. Connect LAN Cable

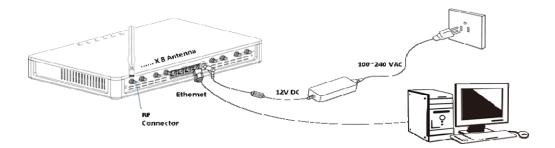
Use a standard LAN cable to connect the device to the Ethernet port on the UE Tester and to LAN/PC  $\,$ 

4. Check the LEDs

The Power LED should be ON.

WAN1, WAN2 LED should be ON

RF1/RF2/RF3/RF4 should be ON depend on the UE test case scenario



# Chapter 3 Specifications



## **General Specification**

Connectivity	- 10x SMA RF connector for External Antennas		
	- Four Gigabit Ethernet LAN ports		
Power Supply	External Power Adapter: Input: AC100~240V~1.6A, 50Hz/60Hz, Altitude 0 to 5000 Meters Output: 12 Vdc, 9A		
Operating Requirement	Operating Temp. 0°C to 40°C		
	Storage Temp5°C to 45°C		
	Operating Humidity 5% to 90% Non-Condensing		
	Storage Humidity 5% to 95% Non-Condensing		
Reset button	Two		
LED	9 LED for Status.		
Housing	426mm(W)x236mm(H)x65mm(D)		

# **RF Characteristics**

Parameter	UMTS		
Frequency	FDD:		
	Band 13: DL/UL: 746~756MHz /777~787MHz		
	Band 4: DL/UL: 2100~2155MHz/1710~1755MHz		
Bandwidth	CPU1:		
	2CA Band 4 + Band 13 (10M+10M)		
	2CA Band 4 + Band 13 (20M+10M)		
	CPU2:		
	2CA Band 4 + Band 13 (10M+10M)		
	2CA Band 4 + Band 13 (20M+10M)		
Beamwidth	External Omni Antennas		
Power rating	+17dBm(50mW) per Antenna.		

Regulatory Requirements			
類別	Area	Standard	Note
EMC	USA	FCC Part 15B	
RF	USA	FCC Part 24E/27/22H/27F/PAG	

#### **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.

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 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 Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **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 minimum distance 20cm between the radiator & your body.

#### Safety Information

All instructions, warning and caution statements that accompany this equipment must be strictly followed at all times to ensure its safe use. Observe all warning and caution symbols that are fixed to this equipment. This electrical equipment is designed with the utmost care for the safety of those who install and use it. However, when using this device, basic safety precautions should always be followed to reduce the risk of fire and injury to persons, and the dangers of electric shock and static electricity. Do not cover the device or block the airflow to the device with any other objects. This product was qualified under test conditions that included the use of the supplied cables between system components. To be in compliance with regulations, the user must use the cables supplied with the unit and install them properly. This includes the power adapter that is provided. Place the unit to allow for easy access when disconnecting the power adapter from the mains wall outlet. Operate this product only with the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your dealer or local electricity company. Do not use this product near water, for example a swimming pool or a bathroom. Keep the device away from excessive heat and humidity and keep the device free from vibration and dust. Wipe the unit with a clean, dry cloth. Never use cleaning fluid or similar chemicals. Do not spray cleaners directly on the unit or use forced air to remove dust. Avoid installing or using this product during an electrical storm. There may be remote risk of electric shock from lightning. During a lightning storm for added protection please unplug it from the wall outlet and disconnect all cables. This will prevent damage due to lightning and power surges. For safety reasons, only authorized service technicians should open the device. If the device is opened the warranty will become void. The device may affect medical equipment and so please take account of any technology restrictions with this equipment. This device, like other radio devices, emits radio frequency electromagnetic energy, but operates within the guidelines found in radio frequency safety standards and recommendations.

It is recommended that the minimum operating distance from the installed Access Point to persons is 20cm.

#### **General Hazard Statement**

Safety notes are marked with symbols. Ignoring the safety notes may lead to personal injury, damage to the instrument and malfunctions.

Signal word	Meaning
DANGER	Indicates an extremely hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates a hazardous situation not related to personal injury.

Signal Words identify the hazard severity level as follow:



Contact with energized parts can cause serious injury.

At least one other trained person must be in attendance, who can immediately and safely disconnect the system if necessary.

This second person must be trained in first aid for emergency purposes



Some parts of all electrical installations are energized. Failure to follow safe work

Practices and the safety warnings may lead to bodily injury and property damage.

For this reason, only trained and qualified personnel (electrical workers as defined in

IEC 60215 or EN 60215 + A1 or in the National Electrical Code or in ANSI/NFPA No. 10) may install or service the installation.



Risk of electric shock

- a) Do not open the AC adaptor housing. Make sure that the AC adapter does ot come in contact with liquids.
- b) Use Only the 3-pin power cord with equipment grounding conductor which was supplied with your instrument and only on 3-pin grounded outlet must be used.



The Cooling vents at the right & left of the enclosure can become obstructed, preventing ventilation of the enclosure.

Make sure that the air vent is not obstructed and remains clear at all times.

### **Device Surface Cleaning**

You may clean the device case using a cloth dampened with mild liquid detergent (such as Dawn) and water.



Always unplug/disconnect power before apply any cleaning to 13245 UE Tester.

Warning Do not submerse the 13245 UE Tester or its accessories in water or allow water to enter into the case; this may lead to electrical shock and/or damage

## Accessories

Item	Description	P/N
	AC/DC Adapter (without power core) AC100~240V~1.6A, 50Hz/60Hz auto switching, 12 V DC, 9A	919902120PH
	3-Pin Power Supply Cord US, with grounding conduc- tor	459000B0IS
	External Antenna	617202CPWY