

Verizon LTE UE Tester

Model: INTTP20213425

Quick Installation Guide



Manufacture By:

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Table of Contents

CHAPTER 1 INTRODUCTION	1
Package Contents	1
Key Feature	1
LEDs	2
Rear Panel	3
CHAPTER 2 INITIAL INSTALLATION	4
Procedure	4
CHAPTER 3 SPECIFICATIONS	5
General Specification	5
RF Characteristics	5
Regulatory Requirements	6
Safety Information	7
Device Surface Cleaning	9
Accessories	10

Chapter 1

Introduction



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

The LTE INTTP20213425 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:

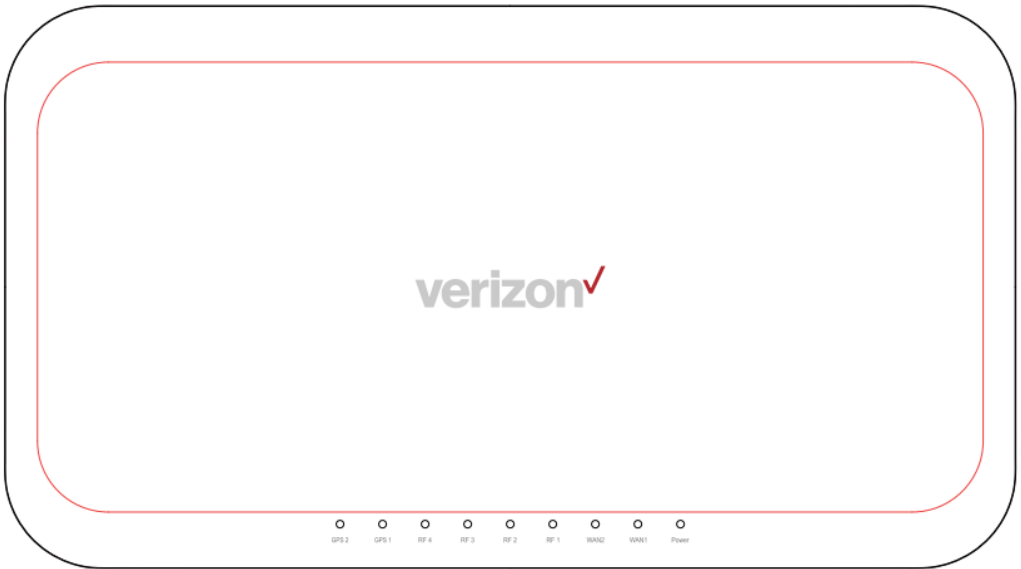


If any of the above items are damaged or missing, please contact your dealer immediately.

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

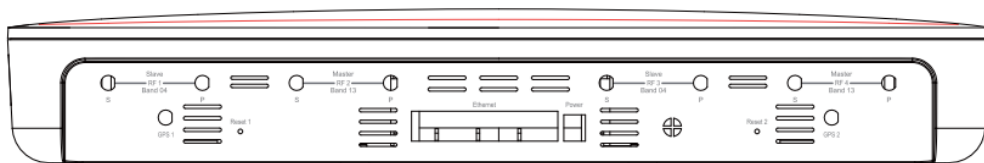
LEDs



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 RF1 in service On Red – Band RF2 RF not in service
RF2 (Red/Green)	On Green – Band RF2 in service On Red – Band RF2 RF not in service
RF3 (Red/Green)	On Green – Band RF3 in service On Red – Band RF3 RF not in service
RF4 (Red/Green)	On Green – Band RF4 in service On Red – Band RF4 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	SMA connection for Band RF1 External Antennas
RF2 Band	SMA connection for Band RF2 External Antennas
RF3 Band	SMA connection for Band RF3 External Antennas
RF4 Band	SMA connection for Band RF4 External Antennas
GPS1	SMA connection for GPS1 External Antennas
GPS2	SMA connection for GPS2 External Antennas

Chapter 2

Initial Installation

2

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

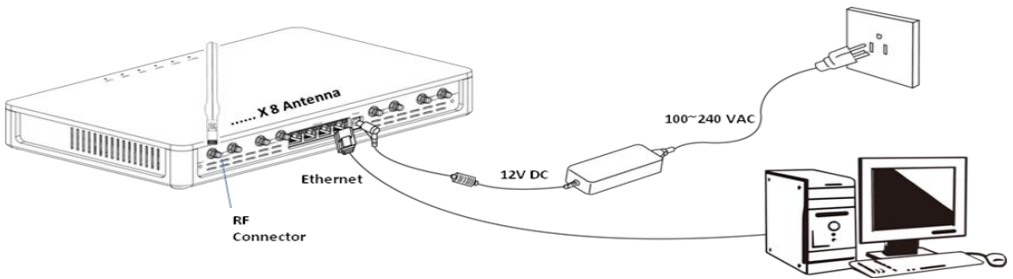
Use a standard LAN cable to connect the device to the Ethernet port on the UE Tester and to LAN/PC

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	<ul style="list-style-type: none"> - 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 Temp. -5°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 Band 2(DL/UL: 1930~1990MHz / 1850~1990MHz) Band 5(DL/UL: 869~894MHz / 824~849MHz)
Bandwidth	CPU1: CA Band RF1 + Band RF2 CPU2: CA Band RF3 + Band RF4
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	

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 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.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

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

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and 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 Words identify the hazard severity level as follow:

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.



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 not 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.






WARNING

Electric-shock hazard

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

Warning Do not submerge 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
 A black rectangular AC/DC adapter with a power cord and a DC output cable.	AC/DC Adapter (without power core) AC100~240V~1.6A, 50Hz/60Hz auto switching, 12 V DC, 9A	919902120PH
 A black power supply cord with a three-pronged grounding plug and a standard power cord end.	3-Pin Power Supply Cord US, with grounding conductor	459000B0IS
 A long, thin, silver external antenna with a connector at one end.	External Antenna	617202CPWY