# Quick start guide





# What's included



#### Hardware specifications:

- 802.11AX tri-band router capable of 6000 Mbps theoretical maximum throughput
- WAN broadband RJ-45 input
- Two (2) LAN Ethernet RJ-45 ports

# Install the included nano-SIM card, or plug in the Ethernet cable into the E1 Gateway Router's WAN port.

To install the nano-SIM card: Use a Phillips head screwdriver to unscrew the SIM card slot cover. Insert the nano-SIM card with chip facing up, until it gently clicks into place. Screw the SIM card slot cover back on.





Plug the power adapter into a power outlet, and plug the other end into the power port on the underside of the router. The router is ready to use when the light arc stops flashing and blue light begins pulsing on and off.



Plug into wall outlet Α B

Connect power cable to power port



The default SSID's (network names) are:

Ericsson [last 4 digits of serial number] 2.4G Ericsson [last 4 digits of serial number] 5G 1 Ericsson\_[last 4 digits of serial number]\_5G\_2

#### The default password for all networks is:

ericssonxxxx

xxxx = Last four digits of the E1 Gateway Router's serial number. (e.g. ericsson1234)



Note: The serial number is printed on the bottom of the



To improve the security of your wireless networks, consider changing the SSID's and passwords to something different than the default. This can be done through advanced router settings.

#### To access advanced router settings:

1. Connect an Ethernet cable from the LAN port on the E1 Gateway Router to your computer, or connect to the E1 Gateway Router via WiFi SSID.



# Advanced router settings (cont'd)

2. Open an internet browser window, type in the IP address: 192.168.1.1, and complete the search by pressing Enter or Return on your keyboard. Alternatively, you can search for: http://E[router-serial-number] (i.e. http://EDU00001234/)

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3. Log in using the default username and password:

Default username: root Default password: ericssonxxxx xxxx = Last four digits of the E1 Gateway Router's serial number. (e.g. ericsson1234)





Advanced router settings may also be accessed via SSH console.

- Connect an Ethernet cable from the LAN port on the E1 Gateway Router to your computer, or connect to the E1 Gateway Router via WiFi SSID.
- 2. Open a PowerShell or Command Prompt with admin privileges.
- 3. Type: ssh root@192.168.1.1



 4. Log into advanced router settings: Default password: ericssonxxxx xxxx = Last four digits of the E1 Gateway Router's serial number. (e.g. ericsson1234)

**Tip:** You can check the cellular module status using AT Commands or with the preinstalled macro by typing: **Ite-info** or **Ite-atcmd AT!GSTATUS?** 



# Frequently asked questions

# How do I change the Wi-Fi SSID (network name) and password?

- 1. Log into advanced router settings, choose **Network** from the list on the left, and then click **Wifi** from the list that appears under Network.
- 2. Find the network you want to edit, and click **EDIT**.



3. To change the network name, look for the **Interface Configuration** section. There, under the **General Setup** tab, you will see a space labeled **SSID** where you can type in a new network name of your choosing.

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4. To change the password, click the Wireless Security tab. There you will see a space labeled Key where you can type in a new password of your choosing. (Be sure to write it down in case you forget it later.)



5. Click SAVE AND APPLY when finished.

# How do I configure LTE/5G?

Log into advanced router settings, choose **Network** from the list on the left, then click **LTE Configuration**. Here you can confirm the SIM, APN, and IMEI are correct.

# How do I access LTE/5G information?

- 1. Log into advanced router settings, choose Network from the list on the left, then click Diagnostics.
- 2. In the section labeled LTE Information, click the CHECK button and wait a few seconds for the web page to display. Here you can find the internal connectivity status, band information, BW, CA, and more.

Status System	Diagnostics		
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# What do the lights on the E1 Gateway Router mean?

The E1 Gateway Router communicates its status using different LED displays.

Status	LED display
Booting	Seven colors cycle the light arc.
Networking connecting	Green light blinks three times.
System ready	Blue light pulses on and off.
Networking change	Yellow light spreads from the center to the edge.
WPS	One by one, each LED turns <b>blue</b> and blinks.
WPS success	Green light blinks five times.
WPS fail	Orange light blinks five times.
Firmware upgrade	LED's display an incrementing progress bar pattern.
Loss or no internet connection	Red light arc pulses on and off.

# How do I check LTE/5G network connectivity and signal strength?

Log into advanced router settings, choose Network from the list on the left, then click Interface. Here you can confirm the WWAN network connectivity is active along with SIM status and signal strength (RSSI).

# Reset to factory settings

There are two ways to reset the E1 Gateway Router to factory settings.

#### Hardware method

Press and hold the **Reset** button located on the base of the router for ten seconds.



# Reset to factory settings (cont'd)

#### Interface method

Log into advanced router settings, choose System from the list on the left, then click Reboot/Reset.
 Select PERFORM FACTORY RESET.

The router will reset to factory default settings and reboot automatically. The process takes about two minutes.



**Note**: Power must be kept on during the full reboot sequence.

# Update firmware

Check with E1 Customer Support to get a link to a validated router firmware image. Download the firmware image and then upload it to advanced router settings.

#### To upload:

- 1. Log into advanced router settings, choose **System** from the list on the left, then click **Backup/Flash Firmware**.
- 2. In the Flash New Firmware Image section, click Choose File and select the firmware image.
- 4. Click FLASH IMAGE.
- 5. Click PROCEED to flash. (This may take around two minutes.)
- 6. Once complete, log into advanced router settings again, click **Status**, and select **Overview** to check the firmware version.

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Backup / Flash Firmware Reboot / Reset	Backup / Restore
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Note: To ensure the router and SIM data are properly updated:

1. Turn OFF the E1 Gateway Router and unplug power for 10 seconds.

2. Plug power back in and turn ON the E1 Gateway Router for a fresh boot.

by Ericsson

LZT 138 2288



# Safety guide

### Safety guide

Before installation or use of the E1 by Ericsson Gateway Router, carefully read all of the instructions in this safety guide for safe operation of the device. This safety guide contains important warnings and cautions regarding safety. Improper setup, care, and operation of the E1 device may lead to the risk of death, injury, or damage to the device or other property, including device accessories. After reading, keep this safety guide handy for future reference.

### Safety symbols

The symbols shown below are internationally accepted symbols that warn of potential hazards with electrical devices.



The exclamation point within a triangle warning sign alerts you to important safety warnings and instructions in the product auides.

The lightning flash within a triangle warning

sign glerts you of dangerous voltage inside

the E1 device. It warns you of the potential

risk of electrical shock to persons.

A

#### Important safety instructions

When using the E1 device, always follow the basic safety precautions to reduce the risk of fire, electric shock and injury to persons, including the following:

- 1. READ these instructions.
- 2. FOLLOW all instructions
- 3. KEEP these instructions.
- 4. HEED all warnings.
- 5. DO NOT use the E1 device near water.
- DO NOT expose the E1 device to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the device.
- 7. CLEAN ONLY with dry cloth.
- 8. DO NOT block any ventilation openings.
- DO NOT install near any heat sources such as radiators, heat registers, stoves, or other equipment that produce heat.
- 10. DO NOT place naked flame sources -- such as candles -- on the E1 device.
- 11. DO NOT defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A groundingtype plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 12. PROTECT the power cable from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the E1 device.
- DO NOT overload wall outlets or extension cords beyond their rated capacity as this can cause electric shock or fire.

- 14. DO NOT USE AND UNPLUG the E1 device during an electrical storm or when unused for long periods of time. There may be a remote risk of electric shock from lightning.
- 15. To completely disconnect the E1 device from the AC Mains, disconnect the power supply cable plug from the AC outlet.
- 16. USE the appointed service personnel for any product service needed. Servicing is required when the E1 device has been damaged in any way, such as a power supply cable or plug is damaged, liquid has been spilled or objects have fallen into the device, the device has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 17. ONLY USE attachments/accessories specified by the manufacturer.

WARNING: Do not open the E1 device! Risk of electrical shock. Voltages in the E1 device are hazardous to life. No user-serviceable parts inside.

Do not attempt to take apart, open, service, or modify the E1 device, power supply, or accessories. Doing so could present the risk of electric shock, fire or other hazard, or damage to the E1 device, power supply, or accessories.

### Safety notice

The E1 device is intended for indoor use only.

The E1 device is intended to be supplied by a Certified AC power adapter suitable for use at Tmax 40 degree C whose output meets ES1, non-hazardous energy level, and is rated O/P: 12Vdc/3.5A. Use only the manufacturer supplied AC adapter approved for use with the E1 device. Use of another AC adapter may change the compliance of the E1 device and may present risk of fire or electric shock.

- ▲ WARNING Do not use the E1 device near water, for example, in a wet basement or near a swimming pool.
- ▲ WARNING Avoid using the E1 device during an electrical storm. There may be a remote risk of electric shock from lightning.

▲ WARNING Do not block air ventilation holes.

### Installation & placement

Verify the E1 device has not been dropped, altered, transported or shipped without proper packaging, or otherwise treated without care before installing the device.

Do not install (or use) the E1 device on an unstable surface. The E1 device may fall, causing serious bodily injury and serious damage to the device.

Do not place objects on the E1 device after installation. Place the E1 device near a main power supply outlet and make sure that you can easily access the power breaker switch.

Avoid smoke and dust. Do not use in smoky or dusty locations. Smoke and dust can damage the E1 device.

Place the E1 device on a flat and even surface.

The E1 device should not be placed close to other pieces of equipment that produce heat or located such that it is subject to direct sun light.

Do not use the E1 device in places which are extremely hot, cold, dusty or humid.

Do not place the E1 device or power supply on a bed, sofa, or other soft surface that may block openings.

### Operation

Do not block any ventilation openings on the E1 device or power supply.

Slots and openings in the E1 device are for ventilation and must never be blocked or covered since they ensure reliable operation of the device itself and protect it from overheating.

Do not restrict the air-flow of the E1 device by placing it in a place with poor ventilation, by covering it with a cloth or by placing it on a carpet.

Do not place the E1 device or power supply in a confined space, such as a bookcase, rack, or stereo cabinet, unless the space is well ventilated.

Use only the manufacturer supplied AC adapter approved for use with the E1 device. Use of another AC adapter may change the compliance of the E1 device and may present risk of fire or electric shock.

Any part of the user's body, other than the hands, should be kept at a distance of 35cm or more away from the E1 device during installation

The frequency and the maximum transmitted power in EU are listed below: 2412-2472MHz: 17.48 dBm 2405-2480MHz: 13 dBm All operational modes: 2.4GHz, 802.11bgn, 5GHz 2412-2472MHz : 19 dBm 5180-5825MHz : 20.3dBm.

### Maintenance

Periodically carry out visual inspections to make sure that no obvious damage has occurred to the E1 device.

Disconnect the E1 device from the electrical supply and contact your service provider if any of the following conditions are detected:

- Failure to function as expected
- Noticeable signs of overheating
- Signs of deterioration of the insulation on electrical conductors
- Damage is found to the power cable or connector
- Liquid has been spilled onto, or an object has fallen into, the E1 device
- The E1 device has been exposed to water or other abnormal contamination

### 🛕 Power supply warning

The power supply is for indoor use only. Only use the power supply included with the E1 device. Operation from voltages other than those indicated may cause irreversible damage to the E1 device and void the device warranty. If you are unsure of the correct operational voltage, please contact the company from whom you purchased or received the E1 device.

Do not attempt to repair or use a damaged power supply.

Do not immerse the power supply in water or subject it to physical abuse.

# 🛕 Cables and cords warning

The E1 device's cables and cords present tripping and entanglement hazards. They should be organized neatly to reduce the risk of tripping and entanglement, which can lead to injury to persons and property. Avoid placing cables and cords in frequently used locations where children or pets might play. Do not allow children or pets to play with cables or cords.

The cables and cords can also present risk of fire or electric shock. Never pull on the power cable to disconnect the E1 device as this can damage the power cable. Do not abuse the power cable by bending, pinching, or knotting the power cable or by exposing it to heat.

Unplug the E1 device when there is a lightning storm or when it is unused for extended periods.

If a power cable becomes damaged, stop using it immediately.

## **Regulatory Information**

#### Federal Communication Commission Interference statement

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 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.

#### **IMPORTANT NOTE:**

FCC 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 35cm between the radiator & your body.

### **Gateway Router Unit**

Main processor	Qualcomm IPQ8074 QUAD-A53 2.2GHz
PHY processor	Qualcomm QCN5024, 2-QCN5054 and QCA8075
Memory	2GB DDR4
Storage	32GB eMMC
micoSD	Mechanical Micro-SD slot
Wi-Fi	Wi-Fi 6, 802.11ax Tri-Band MIMO 4x4, high output level
Router type	EasyMesh™ 2.0 Wi-Fi standard, AX6000 MIMO 4x4, high output level 2.4 GHz, 5GHz low band and separate 5GHz high band
Ethernet	2x 1-Gigabit LAN and 1x 1-Gigabit WAN port
Fixed wireless	4G LTE Advanced or 5G 3GPP module (optional)
SIM Slot	Mechanical Nano-SIM slot
Telephone	1-RJ11 Phone port
Display	Multi-color Light Ring
Buttons	WPS and Reset
AC Electrical rating	100-240 V 1-Amox, 50/60 Hz
DC Power supply	12 DC volt, 3.5 Amax
Noise level	<22 dBA (silent)
Operating temperature	41 0F to 104 0F (5 0C to 40 0C)
Dimensions	Elliptical: 8.10 inch H (205.4 mm) x 5.06 inch D (128.5 mm)
Total weight	3.9lb (1.8Kg) including accessories

We understand that privacy is an important issue for users of the E1 device.

The scope of this notice is related to Ericsson processing personal data in the role of manufacturer of the E1 device. Any personal information provided by you in connection with the usage of the E1 device will be treated by Ericsson in accordance with applicable data protection and privacy laws (including the General Data Protection Regulation, EU Regulation 2016/679, or "GDPR"), and in accordance with our Privacy Notice which can be accessed in the E1 device preferences.

The Privacy Notice is designed to help you understand what personal information we collect, and how we handle and use that information.