

# LANTRONIX®



## E210 Series Cellular Router User Guide

Part Number PMD-00017  
Revision B February 2021

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## Revision History

Date	Rev.	Comments
Sep., 2017	1.0	First release
Oct., 2017	1.1	RAM size and model list
Nov., 2017	1.2	Compatible models
Jun., 2018	1.3	Compatible models
Apr., 2019	1.4	Power consumption, Accessories and LED Status Indicator.
October 2019	A	Initial Lantronix document. Added Lantronix document part number, Lantronix logo, branding, contact information, and links.
February 2021	B	Updated the compatible models, accessories, LED states, reset button behavior, physical installation procedures, default login credentials, and Web Admin console screenshots. Reorganized content and made document enhancements.

For the latest revision of this product document, please check our online documentation at [www.lantronix.com/support/documentation](http://www.lantronix.com/support/documentation).

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# 1 Safety Precautions

## 1.1 General Precautions

The router generates radio frequency (RF) power. When using the router, care must be taken to ensure safety as well as compliance with all the regulations that surround the use of RF equipment.

Do not use the router in aircraft, hospitals and petrol stations or in places where using GSM, W-CDMA and LTE equipment or any other RF equipment is prohibited, and make sure that the router is not interfering with nearby equipment such as pacemakers or medical equipment.

All antennas of the router should be directed away from computers, office equipment, home appliances, etc., and always keep the router at a minimally safe distance of 26.6cm or more from human bodies.

Do not put the antenna inside metallic boxes or other containers.

## 1.2 Using the Router in Vehicles

Check for regulations/law, if any, for authorizing the use of GSM, W-CDMA and LTE equipment in vehicles in your country before installing the router.

Installation of the router should be done by qualified personnel. Consult your vehicle dealer for any possible interference concerns to the use of the router.

Battery of the vehicle could be drained after an extended period when the router is powered by the vehicles main battery.

## 1.3 Protecting Your Router

Please install and operate the router with care, and complying the following;

Do not expose the router in extreme conditions such as high humidity/rain, high temperature, direct sunlight, caustic/harsh chemicals, dust, or water.

Do not try to disassemble or modify the router as there is no user serviceable parts inside and the warranty would be voided in the case of tampering.

Do not drop, hit, shake the router in extreme vibrations.

Do not pull the power supply cable. Please attach or detach it by holding the connector after switching off the supply.

Install and connect the router in accordance with this document.

Failure to do so will void the warranty.

## 2 About this Guide

### 2.1 Purpose and Audience

This guide provides the information needed to install the Lantronix E210 series cellular router. It covers hardware features, installation instructions, and network IP configuration information. This document does not cover how to configure your E210 series cellular router.

The information in this document assumes that the reader has working knowledge of networking (Ethernet, LAN), routing, LTE, and GNSS concepts and terminology.

### 2.2 Additional Documentation

Visit the Lantronix web site at <https://www.lantronix.com/support/documentation> for the latest documentation and the following additional documentation for this product series.

Document	Description
<b><i>E210 Series Cellular Router Quick Start Guide</i></b>	Provides hardware installation instructions, directions to connect the E210 series router, and network IP configuration information.
<b><i>ePack User Guide for E210 and E220 Series Devices</i></b>	Provides the information needed to configure and use the ePack software for the Lantronix E210 series and Lantronix E220 series cellular routers.
<b><i>E210 Series Product Brief</i></b>	Provides E210 series router product overview information and specifications.

# 3 E210 Series Compatible Models

MODEL NAME	GEOGRAPHICAL AREA(S) / OPERATOR	CELLULAR TYPE <sup>1</sup>	BANDS <sup>2</sup>	FALLBACK MODE(S) <sup>1</sup>	BANDS <sup>2</sup>	LOCATION SERVICES	CERTIFICATIONS <sup>3</sup>		FCS <sup>4</sup>	ORDER CODE
							COMPLETED	IN PROGRESS   UNDER CONSIDERATION		
E215	EMEA; South-East Asia; South Asia	3G <sup>11</sup>	8/1	2G <sup>11</sup>	8/3		EN300328	ETA, TEC	Aug. '18	E215F002S
E213	World	LTE-M1 <sup>6</sup>	12 <sup>a</sup> /28/13/20/27/26 <sup>b</sup> /8/3 <sup>c</sup> /66 <sup>d</sup> /25 <sup>e</sup> /1	2G	5/8/3/2	*	FCC, IC, CE, PTCRB, AT&T Wireless, Verizon Wireless		TBD	E213F102S
E214	Australia & New Zealand; Thailand; Malaysia	LTE cat. 1	28/5/8/3	3G <sup>22</sup>	5/8/1		RCM;		Aug. '18	E214F003S
	EMEA; Asia Pacific		28/20/8/3/1/7	3G <sup>23</sup> ; 2G <sup>43</sup>	8/1; 8/3	Optional	CE <sup>7</sup>		Dec. '18	E214F002S
	China; Thailand; Indonesia; India		5/8/3/1; TDD 40/41 <sup>f</sup>				ETA, TEC   SRRC, CTA; Postel			E214F00CS
E214G	Verizon Wireless	LTE cat. 1	13/4	*	N/A	✓	FCC <sup>8</sup> , Verizon Wireless		Nov. '18	E214G001S
	The Americas – excl. Verizon Wireless		12/5/4/2	3G <sup>23</sup>	5/4/2		FCC <sup>8</sup> , PTCRB, AT&T Wireless; ISED			E214G000S
E218	Brazil; Australia & New Zealand; Thailand	LTE cat. 4	28/5/8/3/1/7	3G <sup>23</sup> ; 2G <sup>43</sup>	5/8/1; 8/3	Optional	NBIC		Mar. '19	E218F004S
	NTT docomo		19/21/1			*	-		May '19	E218F005S
E213	450 MHz operators	LTE-M1 <sup>6</sup>	87 TBC/88 TBC/73/72/31/12 <sup>a</sup> /28/13/20/27/26 <sup>b</sup> /8/3 <sup>c</sup> /66 <sup>d</sup> /25 <sup>e</sup> /1	*	N/A		Postel		tbd	E213F10ES
E214G	USA & Canada	LTE cat. 1	71/12/13/14/26(5)/66(4)/25(2)			✓	FCC <sup>8</sup> , PTCRB; ISED		tbd	E214G10AS
	Japan; South Korea		18/5(19)/8/21/3/1/7				JRF, JPA; KC		tbd	E214G107S
E218	EMEA; Asia Pacific	LTE cat. 4	28/20/8/3/1/7	3G <sup>23</sup> ; 2G <sup>43</sup>	8/1; 8/3	Optional	CE; RCM; NCC		tbd	E218F102S

**Table 3-1: E210 Series Compatible Models**

Please consult us regarding the models or features shown in grey italics, which are subject to MOQ and other considerations

<sup>1</sup> Uplink / Downlink maximum data rates

- 2G: <sup>11</sup> 85.6 / 236.8; or <sup>12</sup> 236.8 / 236.8; or <sup>13</sup> 236.8 / 296 kbps
- 3G: <sup>14</sup> 5.76 / 7.2; or <sup>15</sup> 5.76 / 10.1; or <sup>16</sup> 5.76 / 42.2 Mbps
- LTE-M1 [NB1]: 375 / 300 [62.5 / 27.2] kbps updated to LTE-M2 [NB2]: 1,000 / 600 [140 / 120] kbps
- LTE cat. 1: 5 / 10 Mbps (FDD); 3<sup>1</sup> / 8.96 Mbps (TDD)
- LTE cat. 4: 50 / 150 Mbps (FDD); 35 / 130 Mbps (TDD)

<sup>2</sup> Ranked by increasing frequencies

- <sup>a</sup> incl. North America's B17
- <sup>b</sup> incl. KDDI's B18 as well as North America's B5, the latter
- <sup>c</sup> incl. NTT docomo's B19, itself incl. Japan's B6 (3G) incl. Japan's B9
- <sup>d</sup> incl. North America's B10, itself incl. North America's B4
- <sup>e</sup> incl. North America's B2
- <sup>f</sup> More precisely, B41's 2535 MHz ~ 2655 MHz subset, suited to China cell

<sup>3</sup> Please consult us, should any other certification be required

<sup>4</sup> First customer shipment [date of]

<sup>5</sup> 23 dBm output power

<sup>6</sup> 26 dBm output power from 410 MHz to 467.5 MHz, 23 dBm otherwise

<sup>7</sup> Based on compliance with RED; EN 60950-1; etc.

<sup>8</sup> Also, Class I Division 2 for use in explosive atmospheres, as a factory option subject to MOQ and other considerations

<sup>9</sup> by Switzerland's SGS

## 4 Product Features

### 4.1 General Specification

Component	Specification
Casing	Brushed aluminium alloy
Dimensions	92.5 x 57.2 x 22.5 mm (without connectors)
Weight	150 g (approx.)
Operating temperature	-20 °C ~ +60 °C; up to 95 % R.H.
Storage temperature	-40 °C ~ +85 °C; up to 95 % R.H.
Flash memory (SPI)	32 MB
RAM (DDR2 SD-RAM):	128 MB
Ethernet	10/100BASE-T
Wi-Fi	IEEE 802.11b/g/n 2.4 GHz
GPS	IzAt™ gen. 8C gpsOne

**Table 4-1: General Specification**

### 4.2 Power Consumption (mA)

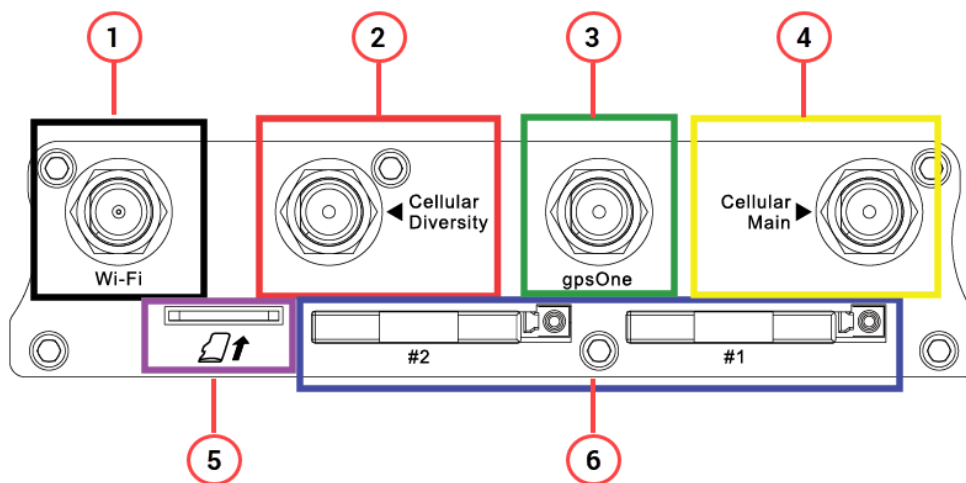
Device State	8V	12V	32V
<b><u>E213</u></b>			
Idle (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module off)	165	110	43
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module idle)	265	171	65
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card connected, cellular module idle)	356	235	91
GPRS (2Tx,3Rx)@900/850MHz (PCL=5)	530	356	135
LTE in communication mode (Tx max.)	420	283	108
<b><u>E214#358S#158</u></b>			
Idle (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module off)	118	79	30
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module idle)	145	99	38
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card connected, cellular module idle)	270	187	73
W-CDMA in communication mode (Tx max.)	575	386	146
LTE in communication mode (Tx max.)	695	471	179
<b><u>E214G#00</u></b>			
Idle (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module off)	137	90	34



Device State	8V	12V	32V
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module idle)	195	135	51
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card connected, cellular module idle)	290	203	82
W-CDMA in communication mode (Tx max.)	650	445	170
LTE in communication mode (Tx max.)	730	495	193
<b><u>E215#02</u></b>			
Idle (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module off)	120	80	29
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module idle)	143	98	37
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card connected, cellular module idle)	265	185	72
GSM in communication mode (PCL=5)	380	252	98
GPRS (2Tx,3Rx)@900/850MHz (PCL=5)	450	307	115
W-CDMA in communication mode (Tx max.)	685	456	173
<b><u>E218#04</u></b>			
Idle (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module off)	163	109	42
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module idle)	250	165	61
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card connected, cellular module idle)	335	225	86
GSM in communication mode (PCL=5)	450	305	115
GPRS (2Tx,3Rx)@900/850MHz (PCL=5)	600	412	158
W-CDMA in communication mode (Tx max.)	740	491	192
LTE in communication mode (Tx max.)	690	465	177
<b><u>E218G#04</u></b>			
Idle (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module off)	163	109	42
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card disconnected, cellular module idle)	261	173	64
Stand-by (WLAN, LAN, Wi-Fi, RS-232 & TF card connected, cellular module idle)	346	232	89
GSM in communication mode (PCL=5)	461	313	118
GPRS (2Tx,3Rx)@900/850MHz (PCL=5)	611	420	161
W-CDMA in communication mode (Tx max.)	751	499	195
LTE in communication mode (Tx max.)	701	473	180

Table 4-2: Power Consumption (mA)

### 4.3 Back Panel Connections



**Figure 4-1: Back Panel Connections**

1	Wi-Fi antenna, RP SMA connector
2	Cellular diversity antenna, SMA connector
3	GPS antenna, SMA connector
4	Cellular main antenna, SMA connector
5	MicroSD-XD card slot
6	Dual SIM slots, Left: SIM2, Right: SIM1

**Note:** Depending on the device model, the number of antenna connectors may vary.

## 4.4 Front Panel Connections

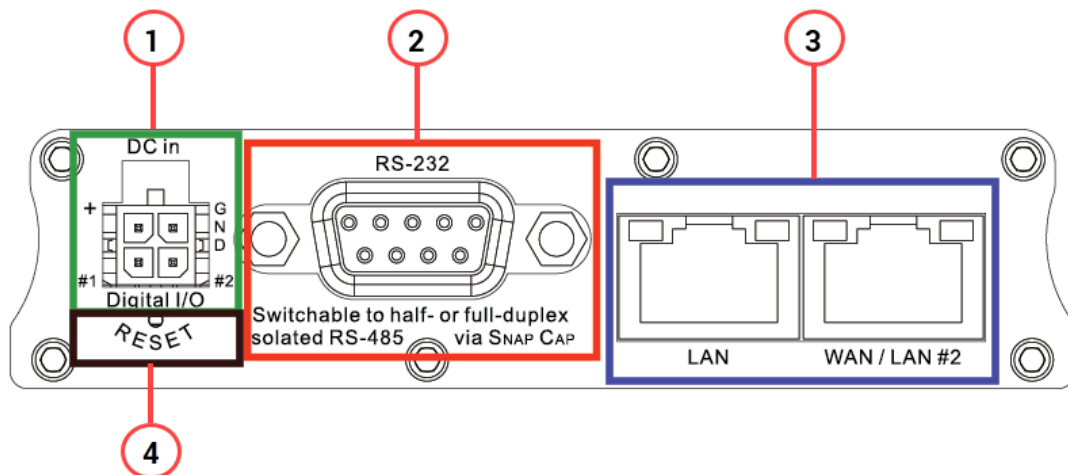
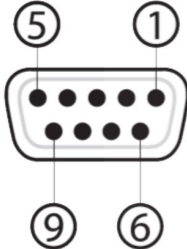


Figure 4-2: Front Panel Connections

1	<p>DC Power 4-pin Microfit 3.0 connector          Top L/R: 8V ~ 32Vdc          Bottom L/R: Two digital I/Os          Digital Input: 0~1Vdc as low                            1~36Vdc as high          Digital Output: Open collector,                            100 mA@24Vdc max</p>
2	<p>RS-232</p> <ol style="list-style-type: none"> <li>1. DCD</li> <li>2. Rx</li> <li>3. Tx</li> <li>4. DTR</li> <li>5. Ground</li> <li>6. DSR</li> <li>7. RTS</li> <li>8. CTS</li> <li>9. RI</li> </ol> 
3	<p>Ethernet ports          Left: LAN          Right: WAN or set as 2<sup>nd</sup> LAN</p>
4	<p>Reset button – Reset the router back to default settings.  <b>Factory reset</b> – Press and hold the reset button for more than 5 seconds.  <b>Reboot</b> – Press and hold the reset button for more than one second but less than 5 seconds  <i>Note: For any pressed or released event to be detected the duration of the press/release event must be at least 200ms.</i></p>

## 4.5 LED Status Indicators

The E210 operation status is indicated by seven LEDs as shown in the figure and table below.



Figure 4-3: LED Status Indicators

Name	Color and Status	Description
Wi-Fi	OFF	Wi-Fi network is inactive
	Blue ON	Wi-Fi network is activated
	Blue Flashing	Wi-Fi network data transferring
Activity	OFF	Cellular data service not connected
	Amber ON	Cellular data service connected
	Amber Flashing	Cellular data transferring
Network	OFF	Not registered on cellular network
	Amber ON	Registered on cellular network (home)
	Amber Flashing	Registered on cellular network (roaming)
Signal	OFF	No signal (CSQ=0 to 5, 97, 98, 99)
	Amber Flashing	Weak signal (CSQ > 6 to 12)
	Amber ON	Strong signal (CSQ > 12)
SIM in use	Blue ON	SIM 1
	Flashing	SIM 2
Power	OFF	Power off
	Green ON	Power on
Alert	OFF	No alert
	Red Flashing	Cellular module reboot, kernel rebooting
	Red ON	Hardware fault

## 5 Installation

### 5.1 Package Contents

- E210 Series Cellular Router
- E210 Series Quick Start Guide

### 5.2 User Supplied Items

- SIM cards (activated by mobile network operator)
- Power supply and adapters
- Wi-Fi antenna
- Cellular/GPS antenna
- Ethernet CAT5 cable to connect the router to the network
- DIN rail clip

Please see [Accessories](#) for compatible Lantronix cables, adapters, and antennas.

### 5.3 Optional Add-on

- SNAP CAP™ RS-485 – to convert E210 series router's RS-232 port to half-duplex or full-duplex RS-485 port

Please consult the SNAP CAP™ RS-485 Datasheet for more details about this add-on.

### 5.4 Accessories

Lantronix accessories for use with the E210 series router are listed in the table below.

Lantronix accessories are available individually or as accessory bundles. For ordering information, please refer to the [E210 Series](#) product web page or contact [Lantronix Sales](#).

**Note: Additional accessories for certain geographic locations are available. Please contact your regional Lantronix Sales office for details.**

Lantronix Part #	E210 Model	Description
<b>Power Supply/Cable/Adapters</b>		
P24E0	Europe	POWER SUPPLY, 4-PIN MICROFIT 1.2 A POWER ADAPTER, WITH EURO PLUG AC CABLE
P24E1	Japan	POWER SUPPLY, 4-PIN MICROFIT 1.2 A POWER ADAPTER, WITH JAPAN PLUG AC CABLE WITH PSE MARK
P24E2	USA	POWER SUPPLY, 4-PIN MICROFIT 1.2 A POWER ADAPTER, WITH USA PLUG AC CABLE
P24E3	AUS/NZ	POWER SUPPLY, 4-PIN MICROFIT 1.2 A POWER ADAPTER, WITH AUSTRALIA & NZ PLUG AC CABLE
P24E4	UK	POWER SUPPLY, 4-PIN MICROFIT 1.2 A POWER ADAPTER, WITH UK/HONG KONG PLUG AC CABLE
KDC42	all models	POWER CABLE, SPARE 4-PIN, W/ POWER FUSE HS

Lantronix Part #	E210 Model	Description
KDC44	all models	POWER CABLE, 1-METER, 4-PIN MICRO FIT 3.0 CONNECTOR, 2.4A FUSE, W/ RED/BLACK/BLUE/WHITE CABLES <b>Note:</b> KDC44 has two more stripped wires for I/Os
<b>Wi-Fi Antenna</b>		
A21H0 (GW.71.5153)	all models	DUAL-BAND 2.4/5.8GHZ DIPOLE ANTENNA FOR ISM & WLAN, HINGED, RP-SMA (M)
<b>Cellular/GPS Antenna</b>		
A31M0	E215	SINGLE ANTENNA, LTE REMOTE, ADHESIVE, 3-METER RG174 COAX, SMA MALE
A31H0	E215	SINGLE ANTENNA, LTE REMOTE, ADHESIVE, 3-METER COAX, SMA MALE
A14M0	E215G, E213G	TWO IN ONE LTE + GNSS, 2*3-METER RG174 CABLE WITH 3*SMA MALE, ADHESIVE MOUNT
A14H0	E215G, E213G	TWO IN ONE LTE + GNSS, 2*3-METER RG174 CABLE WITH 3*SMA MALE, ADHESIVE MOUNT
A32M0	E214, E218	TWO IN ONE LTE + LTE, 2*3-METER RG174 CABLE, SMA MALE
A32H0	E214, E218	TWO IN ONE LTE + LTE, 2*3-METER CABLE, SMA MALE, ADHESIVE MOUNT
A33M0	E214G, E218G	THREE IN ONE LTE + LTE + GNSS, 2*3-METER RG174 CABLE, SMA MALE
A33H0	E214G, E218G	THREE IN ONE LTE + LTE + GNSS, 2*LTE ANTENNA, 2*3-METER CABLE, SMA MALE, ADHESIVE MOUNT
<b>Miscellaneous</b>		
BR551	all models	MOUNTING HARDWARE L-SHAPE DIN CLIP, 1.2MM SPCC; COLOR ZINC-PLATED; WITH CLIP SPRING, SUS304; WITH SCREW AND WASHER

Table 5-1: Lantronix Accessories

## 5.5 Preparing to Install

Before installation, please gather the router, documentation, and user-supplied items as needed for your installation.

- One or two activated SIM cards, provided by your mobile network operator
- Ethernet CAT5 cable for LAN network connection
- Wi-Fi and cellular antennas
- Power supply, cable, and adapters
- Personal computer (see below)

See [Accessories](#) for compatible Lantronix cables, adapters, and antennas.

Ensure that your personal computer is equipped with the following:

- Ethernet port or Wi-Fi connectivity and Internet service
- Web browser such as Internet Explorer 10+ or Google Chrome 30+, Mozilla Firefox 20+ or Apple Safari 4+ to access the Lantronix Web Admin Console
- DHCP client enabled on the computer to obtain a valid IP Address from the router.

### 5.5.1 Enabling DHCP on Your Personal Computer

**To enable DHCP on Windows 8 or 10:**

1. To access the active network, go to Start > Control Panel > Network and Internet > Network and Sharing Center. Click the active network connection. The Network Connection Status dialog box appears.
2. From the Network Connection Status dialog, click Properties > select Internet Protocol Version 4 (TCP/IPv4) and click Properties to display the Internet Protocol Version 4 (TCP/IPv4) Properties dialog box.
3. On the General tab, select following options:
  - Obtain an IP address automatically
  - Obtain DNS server address automatically

**To enable DHCP on Mac OS:**

1. Launch System Preferences, then choose Network.
2. Select Ethernet from the adapters list on the left.
3. Set the Configure IPv4 drop-down to Using DHCP

## 5.6 Connecting the E210 Router

The steps for connecting the E210 router are:

1. Insert the SIM cards.
2. Connect the cellular and Wi-Fi antennas.
3. Connect the AC power.
4. Connect the router to a computer.
5. Run Quick Setup to configure network settings .

### 5.6.1 Insert SIM Cards

To insert the SIM card:

1. Eject the SIM tray by pushing the yellow eject button inwards.
2. Pull the SIM tray out from the slot.
3. Place the mini-SIM card on the tray with SIM chip facing up.
4. Insert the tray in place carefully.

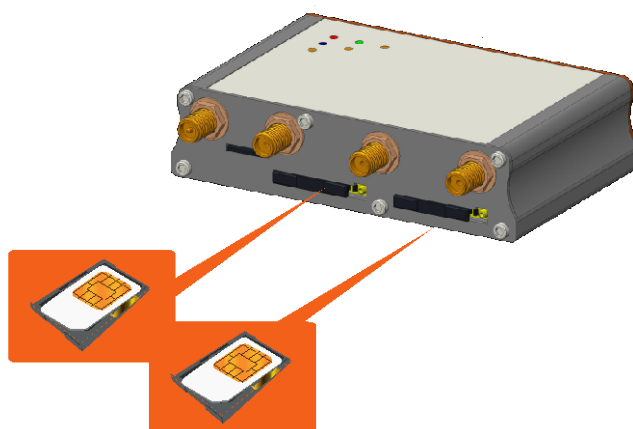
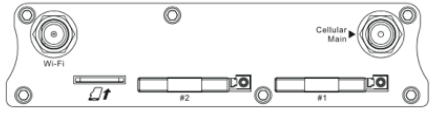
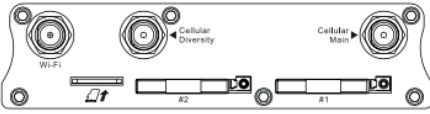
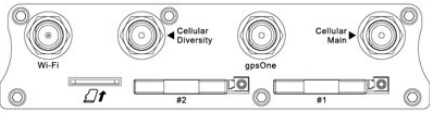


Figure 5-1: Inserting the SIM Card



## 5.6.2 Connect the Antennas

The table shows the cellular/GPS main and auxiliary antenna options and the cellular/GPS/Wi-Fi antenna connections on the different E210 series models.

Model	Cellular Main	Cellular Auxiliary	Antenna connections
E213 E215	Cellular only	N/A	
E214 E218	Cellular only	Cellular only	
E214G	Cellular only	GPS and cellular	

**Table 5-2: Antenna Options for E210 Series**

### To connect the Wi-Fi/cellular/GPS antenna:

1. Insert the antenna connector into the appropriate antenna connector on the back panel of the router, referring to the image above and the labels printed on the router.
2. Use your fingers to securely tighten (clockwise direction) the antenna connector to the connector on the base unit.

#### Note:

- **Dual cellular antennas improve data throughput/performance on cellular data transfer rate.**
- **Cellular antenna selections are based on frequency bands of cellular network operators in individual countries. For details, refer to [E210 Series Compatible Models](#) or contact [Lantronix Technical Support](#) online.**



**Figure 5-2: Antenna Connections**

### 5.6.3 Connect the AC Power

#### To connect the AC power:

1. Connect the AC power to the DC in connector, then connect the Micro-Fit connector to the power input, located on the front panel of the Lantronix Router.
2. Plug the AC cord into a standard AC receptacle as shown below. For connection details, refer to [Section 4.4, Front Panel Connections](#).

The power LED will light when power is applied.

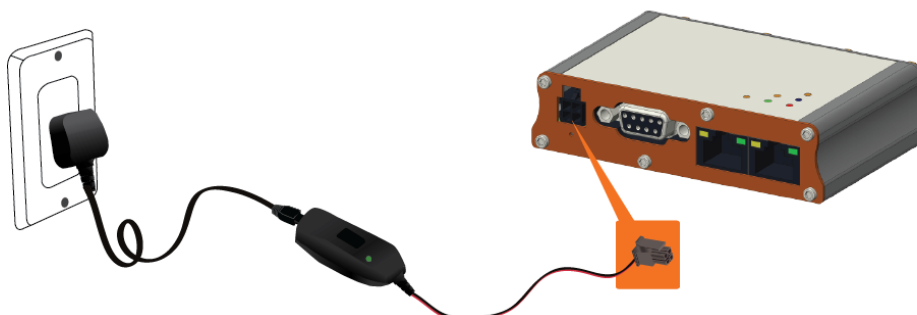


Figure 5-3: Connecting the AC Power

### 5.6.4 Connect the Router to a Computer

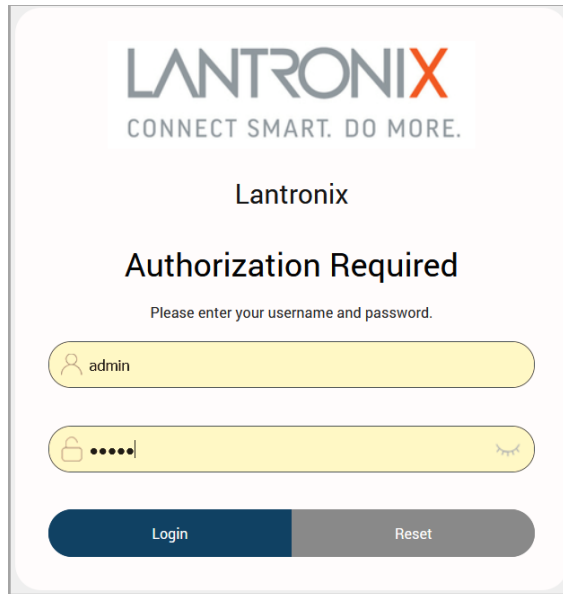
Connect the router to your computer using the router's Wi-Fi access point or an Ethernet cable and log in to the Web Admin page to verify the LAN connection.

#### To connect via Wi-Fi:

1. On the PC, connect to the router's Wi-Fi access point. The table below shows the default wireless access point SSID.

Parameter	Details
<b>SSID</b>	Lantronix E21X - for E210 series devices Lantronix E22X - for E220 series devices
<b>WPA/WPA2 TKIP Key</b>	W1rele\$\$

2. Open the browser to 192.168.1.1. The Web Admin Console log in page is displayed.



**Figure 5-4: Web Admin Login Page**

3. Log in to the Web Admin console. If the installed ePack firmware is version 2.4.4 and higher, the default factory passwords are:

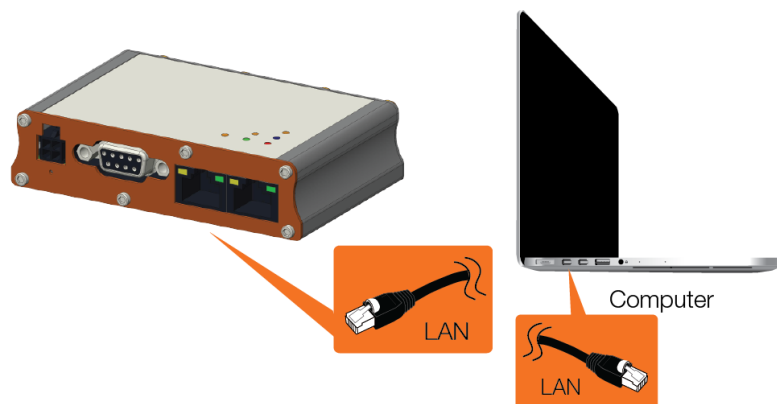
User	Default Password
admin	admin
root	L@ntr0n1x

For password change requirements and for older firmware versions, please see [Default Configuration for Web Admin Page](#). We recommend that you set a unique, strong password for the router and store the password in a secure location.

4. Next, you are ready to configure the network settings from the Quick Setup page.

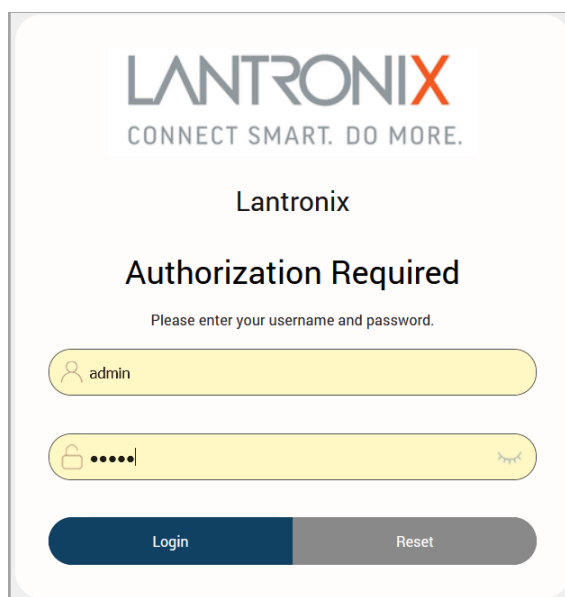
#### To connect via Ethernet:

1. Connect an Ethernet cable between the LAN port on the front panel of the router and the Ethernet port on the computer.



**Figure 5-5: Router to Computer LAN Connection**

- Open the browser to 192.168.1.1. The Web Admin Console log in page is displayed.



**Figure 5-6: Web Admin Login Page**

- Log in to the Web Admin console. If the installed ePack firmware is version 2.4.4 and higher, the default factory passwords are:

User	Default Password
admin	admin
root	L@ntr0n1x

For password change requirements and for older firmware versions, please see [Default Configuration for Web Admin Page](#). We recommend that you set a unique, strong password for the router and store the password in a secure location.

- Next, you are ready to configure the network settings from the Quick Setup page.

### 5.6.5 Quick Setup

Quick Setup network configuration helps get the IP network port up and running so that you can configure other router settings. To skip the Quick Setup and directly configure the network settings including advanced settings, go to the Network tab.

For details on software configuration, please refer to the *Lantronix ePack User Guide for E210 and E220 Devices*.

#### To run quick setup:

- Log in to the Web Admin page and click **Quick Setup**.

The Quick Setup > Network Setup page is displayed. Basic network parameters for LAN, WAN, Cellular, and Wireless LAN can be configured from the Network Setup page.

**Network Setup**  
Here you can configure the basic aspects of your device like its hostname or the timezone.

**Local Area Network (LAN)**

**IPv4-Address** 192.168.1.1  
If this parameter is modified, use "Apply Unchecked" instead of "Save & Apply" to avoid roll back of the configuration

**IPv4-Netmask** 255.255.255.0

**Wide Area Network (Wired WAN)**

**Protocol** Manual

Manual => Used if you have static IP allocated from ISP.  
Automatic => Used if you need to do dhcp with ISP.  
PPPoE => Used if you need to do dial-up over ethernet with ISP.

**Cellular**

**SIM settings**

**APN** \_\_\_\_\_

**PIN** \_\_\_\_\_

**Authentication Type** NONE

**Enable roaming**

**Cid** 1 \_\_\_\_\_

**Wireless Network (LAN)**

**Disable**

**Mode** ap

**SSID** Lantronix E22X \_\_\_\_\_

**Encryption** psk-mixed

**Password** ••••••••

Figure 5-7: Quick Setup

2. Modify the LAN, WAN, Cellular, and Wi-Fi network settings as necessary.
3. Click **Save & Apply** to store the configuration.

**Notes:**

- **In Cellular, all fields such as APN depend on SIM cards provider/cellular network operator, enquire with them for authentication credentials if needed.**
- **After storing the network configuration, the cellular connection should be established within one minute, provided there is adequate signal reception (if the default setting is used).**

4. To see the status of the network connections, click **Status** and view the Overview page.

## 5.6.6 Default Configuration

All usernames and passwords are case sensitive.

### 5.6.6.1 Default Configuration for Web Admin Page

If the installed ePack firmware is version 2.4.4 and higher, the default factory passwords are:

User	Default Password
admin	admin
root	L@ntr0n1x

**Table 5-3: Default Web Admin Page Credentials**

**Note:**

- **ePack firmware versions 2.4.4 and above require you to change the factory default passwords before any other router configuration can be done. Both the admin and root passwords must be changed.**

If the installed ePack firmware is older than version 2.4.4, the default factory passwords are:

User	Default Password
admin	admin
root	M@estroW1rele\$\$

**Table 5-4: Default Web Admin Page Credentials**

**Note: Username and password are both case sensitive.**

### 5.6.6.2 Wireless Access Point SSID

The wireless access point SSID may be configured in the Web Admin console.

Parameter	Details
<b>SSID</b>	Lantronix E21X - for E210 series devices Lantronix E22X - for E220 series devices
<b>WPA/WPA2 TKIP Key</b>	W1rele\$\$

**Table 5-5: Default Wi-Fi Credentials**

### 5.6.6.3 Default Interface Configuration

Interface	Details
WAN (Ethernet)	Automatic (DHCP client) Priority source of Internet with Cellular backup
LAN (Ethernet)	Active DHCP with starting IP address 192.168.1.100 with pool of 100 clients.
Cellular	No PAP/CHAP authentication
Wireless (LAN)	Wi-Fi enabled as access point with SSID "Lantronix E21X" or "Lantronix E22X"

**Table 5-6: Default Interface Configuration**

### 5.6.7 SNAP CAP™ RS-485

SNAP CAP™ RS-485 connects to the E210 series router's RS-232 port and converts it to half-duplex or full-duplex RS-485 port. The duplex setting is configured by a switch on the side of the SNAP CAP RS-485. The port parameters are configured in the software (ePack).

Please consult the *SNAP CAP™ RS-485 Datasheet* for more details.

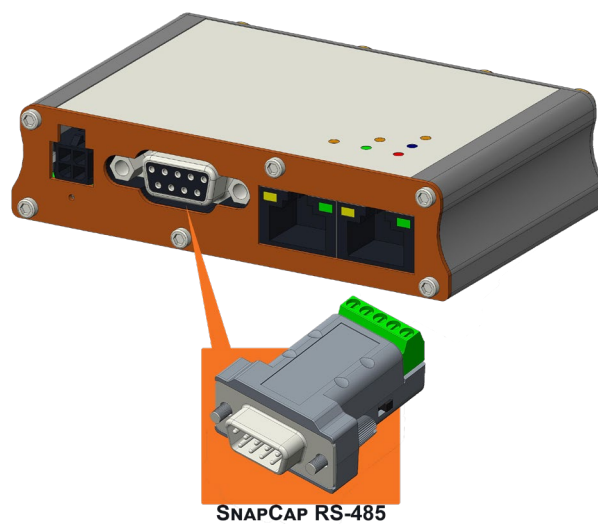


Figure 5-8: Connecting the SNAP CAP RS-485

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## FCCIC statement

### **Federal Communication Commission Interference 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.

### **FOR MOBILE DEVICE USAGE (>20cm/low power)**

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.



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## FCCIC statement

### Industry Canada statement

This device complies with ISED's licence-exempt RSSs. 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.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

#### **FOR MOBILE DEVICE USAGE (>20cm/low power)**

Radiation Exposure Statement:

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 20 cm entre le radiateur et votre corps.

#### **DETACHABLE ANTENNA USAGE**

This radio transmitter [IC: 3867A-E213W] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Le présent émetteur radio [IC: 3867A-E213W] a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué pour tout type figurant sur la liste, sont strictement interdits pour l'exploitation de l'émetteur.

Manufacture	Model number	Antenna Type	Max Gain	Impenndance
Taoglas	GW.71.5153	Dipole	2.4 - 2.5 GHz: 3.32dBi	50 Ohms