



Regesta Lite AU

Installation Manual

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I Related Documents

Teldat-Dm748-I *Software Updating*

Teldat-Dm781-I *Cellular Interface*

Chapter 1 About This Manual

This is the installation manual for the **Regesta Lite AU** router and contains information on how to correctly install this device in a working environment.

1.1 Supported Devices

The information provided in this installation manual only applies to the **Regesta Lite AU** router, models 2G / 3G.

1.2 Who should read this manual?

This manual should be read by the support personnel who need to install, configure, maintain and monitor the device.

1.3 When should this manual be read?

Read this guide as soon as you are ready to familiarize yourself with the device and its components.

This manual will help you understand your new device in greater depth.

1.4 What is in this manual?

This installation guide contains the following information:

- A description of the available features in the **Regesta Lite AU**.
- Technical specifications.
- Power supply requirements.
- A description of the device LEDs and connectors.
- Troubleshooting.

1.5 What is not in this manual?

This manual does not contain information relative to the device software or its configuration. For information on how to configure this device, please see the relevant protocol manuals, which can be found on the Teldat website: <http://www.teldat.com>

1.6 How is the information organized?

Each chapter focuses on a specific part of the hardware and its components. All descriptive, technical specifications and information on a component can be found in the relevant chapter.

1.7 Technical Support

Teldat S.A. offers a technical support service. Device software can be upgraded on a regular basis for maintenance purposes and for new features.

Contact information:

Web: <http://www.teldat.com>

Tel.: +34 918 076 565

Fax: +34 918 076 566

Email: support@teldat.com

Chapter 2 Regesta Lite AU Router

2.1 Features

The **Regesta Lite AU** router family is a range of IP routers especially designed to operate in hostile and extreme environments. Thanks to their ruggedized mechanics and special characteristics, which allow them to bear extreme temperatures, these routers are particularly suited for: industrial environments, industrial telecontrol, distribution installations for electricity, gas, water, etc.

The main characteristic of this router family lies in the possibility of accessing WirelessWAN (WWAN) data networks.

Thanks to its module design, this device can quickly adapt to the latest WWAN technologies. The **Regesta Lite AU** family is compatible with wireless technologies such as GPRS, EDGE, UMTS, HSDPA, HSUPA, HSPA+, LTE, CDMA 2000 1xRTT, CDMA Ev-Do. The basic license makes connection through the GPRS/EDGE technology possible. Additional licenses allow technologies with a wider bandwidth to be supported. The device also has space for 2 SIM cards: one active SIM and the other used as backup.

As for LAN networks, this device incorporates a 2 port 10/100 BaseT LAN Ethernet Switch.

The device's RS-232 console port can be configured as a DCE asynchronous serial communications port with a maximum speed of 38400 bps and without control signals. The device can incorporate two additional asynchronous serial ports with a maximum speed of 115200 with DCE RS-232 technology or with RS-485 2-4 wires/RS-422. The serial port connectors are DB9.

The device incorporates a transparent protector that prevents connectors from being touched while the device is running.

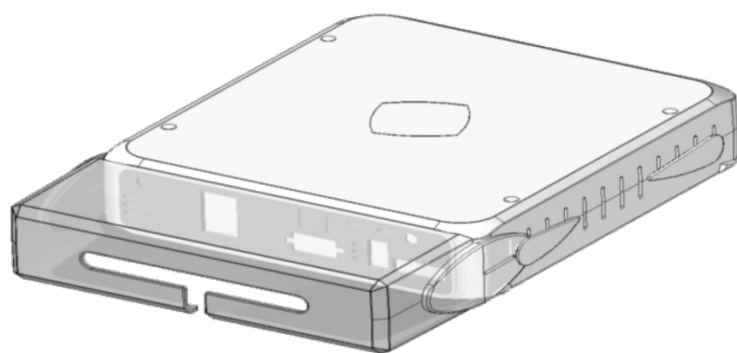


Fig. 1: **Regesta Lite AU**

2.1.1 Power supply

For further information on the **Regesta Lite AU** power supply, please see [Power Source](#) on page 10.

2.1.2 Hardware Monitoring

The only way to monitor the **Regesta Lite AU** hardware is through the LEDs on the front panel. The LEDs provide visual information on what is happening in the device. They indicate the state of the hardware components, if there is connectivity, data flow, etc.

For further information on the LEDs panel, please see section [LEDs](#) on page 6.

Chapter 3 Components and Power Supply

The following chapter provides detailed information on the chassis of the **Regesta Lite AU** router and its components. This information includes:

- Components
- Assembly instructions
- Power supply
- RST button
- Data connection
- SIM card installation

3.1 Components

3.1.1 Front Panel

The following figure shows the front panel.

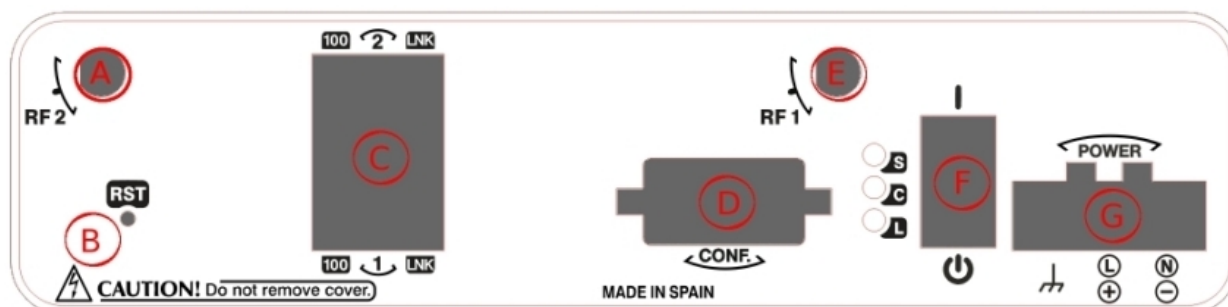


Fig. 2: Front Panel

The front panel elements are as follows:

Front Panel Elements

Item	Description
A	RF2. WWAN antenna connector.
B	RST. Reset button. For further information on how the reset button works, please see RST Button on page 11
C	2-port Fast Ethernet Switch
D	CONF. DB9 connector providing access to the device local console for configuration and monitoring purposes. (This connector can also be used as an RS-232 asynchronous DCE serial port).
E	RF1. WWAN antenna connector.
F	I/O. ON/OFF power switch, position I for ON and position O to switch it OFF.
G	POWER. Power connection. For further information on the power connection, please see section Power Source on page 10.

In addition to the connectors, the front panel also contains a set of LEDs that provide information on the state of the router.

3.1.1.1 LEDs

The LEDs are located, as shown in the following figure, on the router front panel:

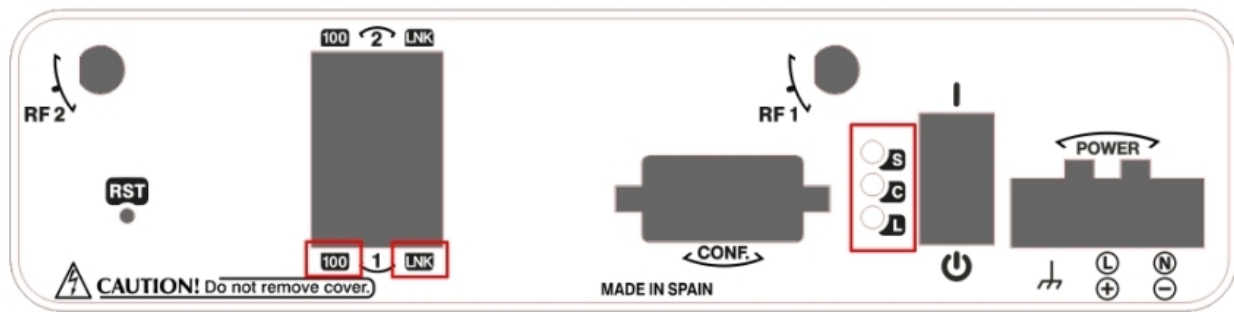


Fig. 3: Front Panel LEDs

While the device is in startup mode, LED “L” lights up in green. Once the device has started up, the LEDs indicate the following:

LEDs

LED	Associated Interface	Status	Description
S	Cellular interface	Green	SK1 operating SIM. This processes traffic through the carrier for the SIM installed in this tray.
		Amber	SK2 operating SIM. This processes traffic through the carrier for the SIM installed in this tray.
C	Cellular interface	Red	Cellular interface is unavailable, not installed or not registered.
		Amber	The device has registered in the network and is in process of establishing the PPP protocol.
		Green	The device is registered, PPP is established and it can send IP traffic through the PPP interface. <ul style="list-style-type: none"> • Steady: Data is not being transferred. • Flashing: Data is being transferred.
L	Cellular interface	Green	Coverage level above -90dBm.
		Yellow	Coverage level between -90dBm and -100dBm.
		Red	Coverage level below -100dBm.
		Off	Cellular interface is not active.
100	Associated to each Ethernet switch connector (LAN1..LAN2)	Amber	ON -> Connection at 100Mbps. OFF -> Connection at 10Mbps.
LNK	Associated to each Ethernet switch connector (LAN1..LAN2)	Green	ON -> Ethernet connection (link) established: <ul style="list-style-type: none"> • Steady: Data is not being transferred. • Flashing: Data is being transferred. OFF -> Ethernet connection is not established

3.1.2 Rear Panel

The following figure shows the rear panel. Here you will find the remaining connectors of the **Regesta Lite AU** router.

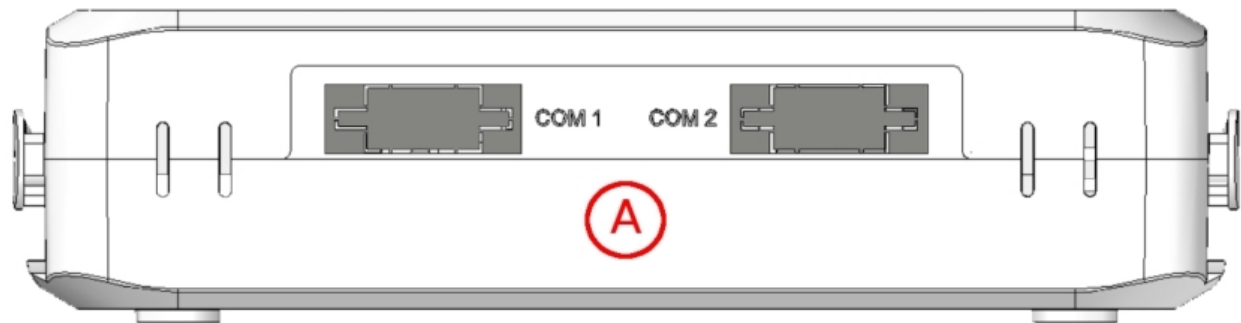


Fig. 4: Rear Panel

The following table provides information on each connector, as well as a description:

Rear panel elements

Item	Description
A	COM1, COM2. DCE RS-232 serial ports or RS-485 2-4 wires/RS-422.

3.1.3 Underside Panel

The following elements can be found on the underside panel:

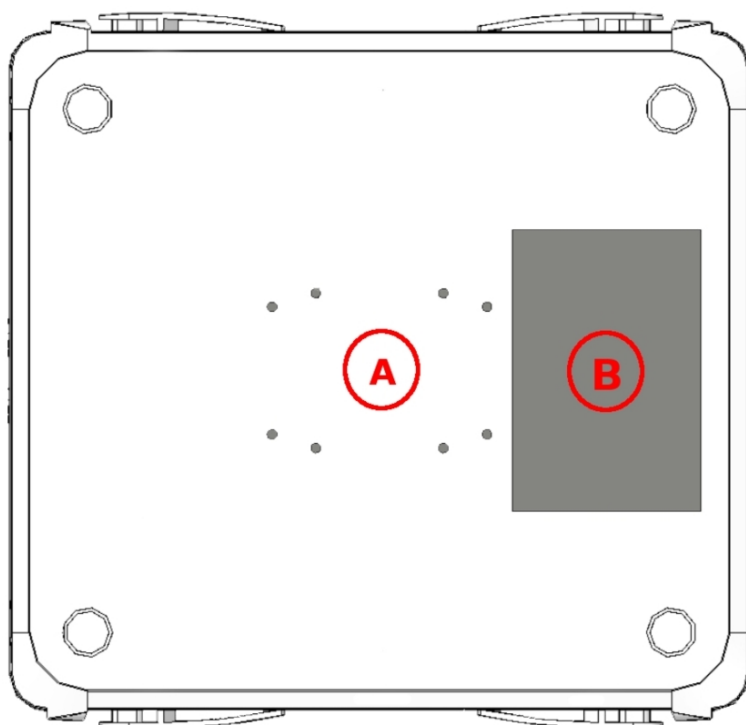


Fig. 5: Underside Panel

The following table contains details on the significant elements on the underside panel.

Underside Panel elements table

Item	Description
A	Slots for the accessories to attach the device to the DIN rail mount. For further information on this accessory, please see section Installing a DIN rail mount accessory on page 8.

B

Platform where the label containing product information is placed. This label contains information on the device model, MAC, serial number, etc.

3.1.4 Upper Panel

The following figure shows the aspect of the upper panel:

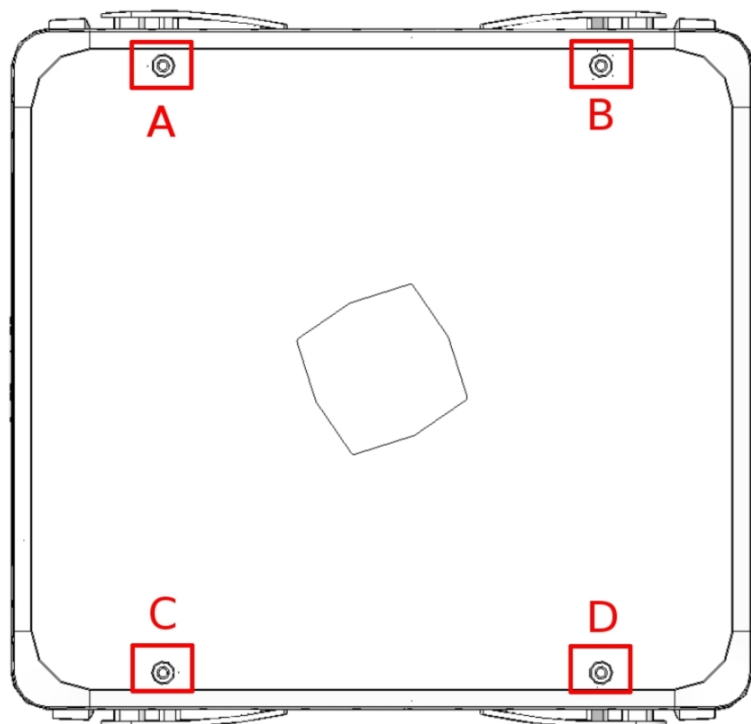


Fig. 6: Upper panel

The upper casing elements are as follows.

Upper casing elements table

Items	Description
A, B, C, D	Screws that allow you to disassemble the router's upper casing.

3.2 Assembly

3.2.1 Installing a DIN rail mount accessory

The **Regesta Lite AU** packaging includes a DIN rail mount kit to which the device can be connected (allowing for several positions).

The kit contains 2 screws to adjust the rail mount to the underside of the device. There are a set of holes on the underside that allow you to place the DIN rail mount in two different positions:

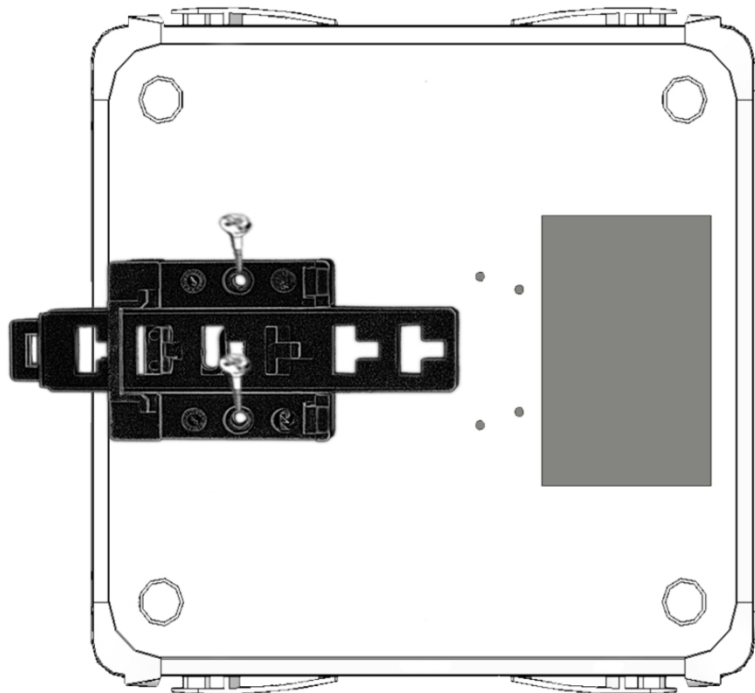


Fig. 7: DIN rail mount: Position 1

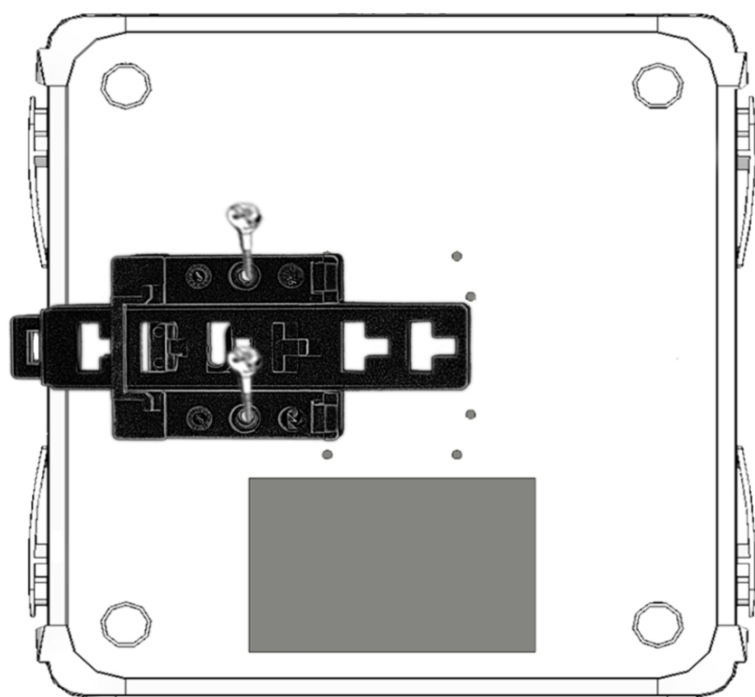


Fig. 8: DIN rail mount: Position 2

3.2.2 Installing the Protector

The transparent protector protects the **Regesta Lite AU** connectors from being manipulated while the device is operating. The device does not come out from the package with the protector on; it is a separate piece.

The following figure shows you how to attach the protector to the device.

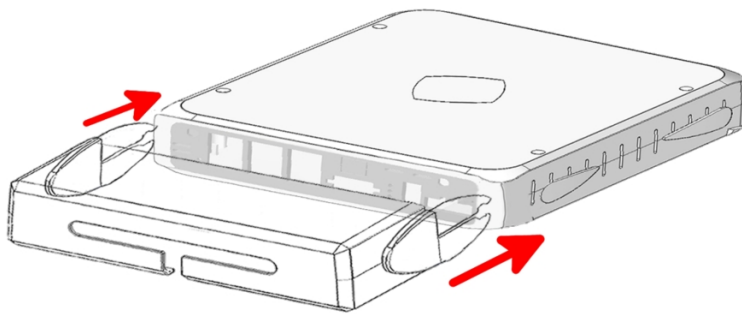


Fig. 9: Installing the transparent protector

3.3 Power Source

The **Regesta Lite AU** router must be powered in DC voltage. The nominal power voltages are 24V DC.



Note

Before connecting the router, please read the following instructions carefully!

3.3.1 Power Buffer

The **Regesta Lite AU** has a special feature: the Power Buffer. This feature allows the device to keep working for a few seconds after the power goes off.

3.3.2 Workplace Conditions. Main Characteristics

- The device should not be placed amongst papers, magazines or other elements that could hinder natural air circulation.
- Knocks and/or strong vibrations should be avoided during transport, operation and storage.



Warning

The electric current in power cables, telephone lines and communication cables is dangerous. To prevent electric shocks, before installing, handling or opening the equipment covers, connect and disconnect the cables following the steps set forth in [Connecting](#) on page 11 and [Disconnecting](#) on page 11.

3.3.3 Connecting the Power Supply

To connect the power supply to the device, please follow the steps set forth in section [Connecting](#) on page 11.



Warning

To avoid electric shocks, residual current circulation and other unwanted effects, also affecting communications, the following is recommended:

All interconnected communication devices should be plugged to THE SAME GROUNDED POWER OUTLET, which should at the same time be of good quality (lower than 10 ohms).

Whether the workplace is provided with an uninterrupted power supply system (UPS), regulated supply or it is independent from the rest (such as lighting, etc.); it is highly recommended that all data devices should be connected to the same power source. This will avoid operating and premature aging problems of drivers and other components.

3.3.4 Connecting

- Make sure that the router's power supply switch is in the OFF position (0).
- Ensure that the power supply is NOT connected to either the electricity or the router.
- Connect all data cables.
- Connect the power supply cable to the device.
- Connect the power supply cable to the electricity supply.
- Place the router's power supply switch in the ON position (1).
- Lower the transparent protector.

3.3.5 Disconnecting

- Raise the transparent protector.
- Make sure that the router's power supply switch is in the OFF position (0).
- Disconnect the power supply from the electricity supply.
- Disconnect the power supply from the router.
- Disconnect the data cables.

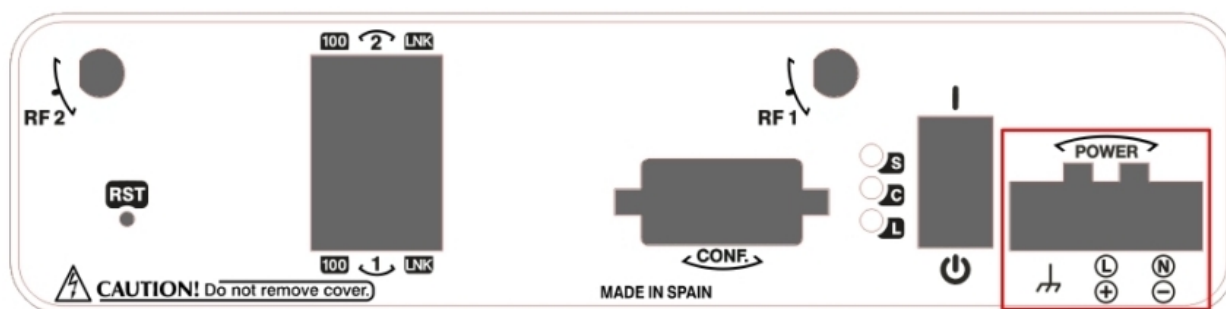


Fig. 10: Power Supply Connector

The connector has 3 terminals, 2 for powering, and another, labeled ground, that connects the device to the ground point where the rest of the devices are connected. Although the label indicates a positive terminal/line and another negative/neutral, the device can be connected to the power source with reverse polarity.

To connect the power to the device, please follow the steps set forth in [Connecting](#) on page 11: check that the power switch is in the OFF position (0) and that the power source is NOT connected to the electricity network; find the Power Supply connector (located on the front panel) and insert the power cable connector.

3.4 RST Button

The **Regesta Lite AU** router has a button that can be accessed from the outside and is labeled “RST”. It is located on the front panel and has two functions.

- To trigger a restart.
- To restart the device with the default configuration. The default configuration has IP 192.168.1.1 assigned to all switch ports.

The external button is physically protected, so it cannot be accidentally pushed. You need a sharp-edged object to activate it.

3.4.1 Restarting the device

Follow the steps below to restart the device:

- (1) Press the RST button. Device restart is indicated by the 3 LEDs on the front panel lighting up in amber.

- (2) Stop pressing the RST button as soon as the 3 LEDs on the front panel are lit up.
- (3) The device will begin the restart with LEDs S and C off and LED L in green.

3.4.2 Default Configuration

The RST button allows you to boot the device with its default configuration through the following steps:

- (1) Press the RST button. Device restart is indicated by the 3 LEDs on the front panel lighting up in amber.
- (2) Keep pressing the RST button. The S LED will flash green while you are still pressing the RST button. This state implies that the device configuration has changed to the default configuration.
- (3) Stop pressing the RST button to allow the device to restart.
- (4) The device will begin the restart with LEDs S and C off and LED L in green.
- (5) As the device now has the default configuration, you can access it through the IP (bearing in mind that the default address for the equipment is 192.168.1.1 and that it is accessible from any switch port).

3.5 Connecting the data

The **Regesta Lite AU** router has the following data connections.

3.5.1 2-Port Ethernet Switch

The **Regesta Lite AU** router incorporates a 2-port 10/100 BaseT Switch with automatic MDI/MDIX to connect to a local area network (LAN); this has a 100 LED to indicate connection at 100 Mbps and a LNK LED indicating the physical connection.

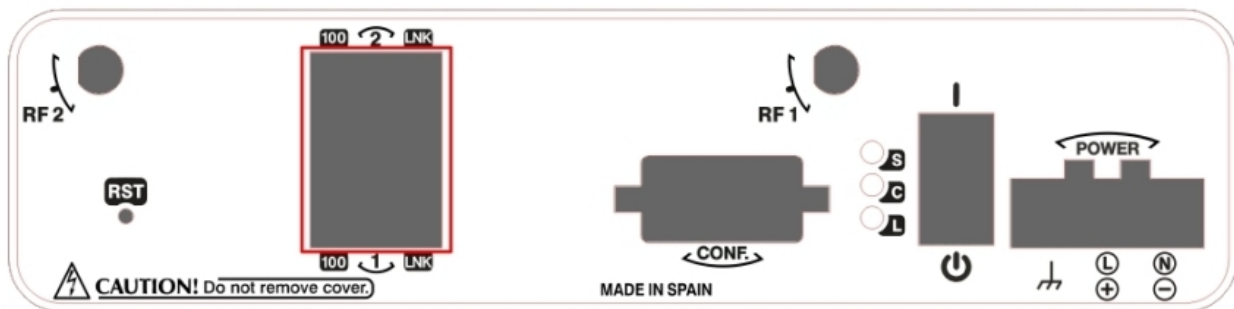


Fig. 11: LAN switch PORTS



Note

During booting and in BIOS mode, only the LAN 1 connector is available.

3.5.2 WWAN Antenna Connection (RF connectors)

The **Regesta Lite AU** router has two connectors for RF antennas. To assemble and disassemble the antennas, simply screw them into the connectors labeled RF1/RF2 (located on the front panel of the device).

The RF1 connector is connected to the module's MAIN connector and the RF2 connector to the AUX connector.

Installing these antennas in the **Regesta Lite AU** router is necessary to improve the quality of the signal received and transmitted by the WWAN module (GPRS, UMTS, HSDPA, HSUPA, etc.).

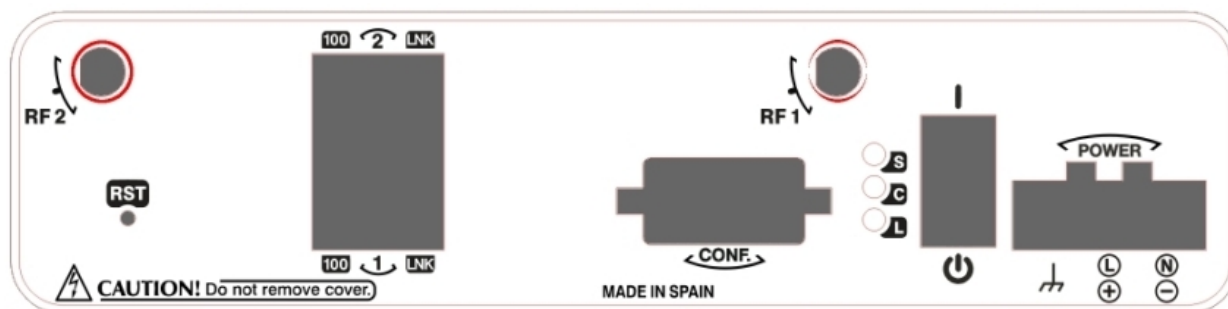


Fig. 12: WWAN antenna connectors



Note

To get high-quality performance, the router must always have the WWAN antennas installed. The WWAN interfaces with access to the 2G network (GPRS/EDGE) are operative in all the devices in this range. To access the 3G network (UMTS/HSDPA/HSUPA) or HSPA+ the device must have additional licenses installed.

When the RF1 and RF2 antennas are not directly connected to the router but installed through extension cords, the minimum distance between them must be 7 cm. The maximum recommended distance between the two antennas is 25 cm.

To achieve an optimum performance, the radio frequency accessories installed (antennas and cables) should be those recommended by us.

We offer a series of accessories (90° mount antennas, antennas for outdoor installation, antennas for ceiling installation, extension cables, etc.) that allow you to install the devices in different locations.

3.5.2.1 Placing the Antenna

The orientation of the antenna and its location with respect to other wireless devices and radiation sources (such as communication devices, personal computers, etc.) can influence significantly the device performance.

The antennas transmit and receive radio signals. Performance is also affected by environmental factors (such as the distance between the device and the base station), physical obstacles and other interferences due to radio frequencies (RF).

To receive better coverage, follow these steps:

- Whenever possible, place the antenna where there are no physical obstacles. Obstacles between the antenna and the base station degrade the wireless signal. Place the antenna above ground level and steer it towards the nearest base station.
- The density of materials also affects the antennas. Place them away from any type of wall, metal screens, mirrors, etc.
- Do not place the antenna near columns that could throw shadows and reduce the coverage area.
- Keep the antenna away from metal pipes such as canalization, air-conditioning etc.
- Bear in mind that other wireless devices such as telephones, microwaves, etc can temporarily interfere with the quality of the wireless signal.
- We do not recommend that you install antennas in racks containing communication devices, computers, etc. Use an extension cable and place the antenna outside.

The following recommendations are applicable to all wireless devices:

- Do not touch or move the antenna while the device is transmitting or receiving.
- When the antenna is transmitting, do not touch any equipment that contains devices that radiate very close to, or touching, any exposed part of the body (particularly face and eyes).
- Do not install the device in areas where the atmosphere is potentially explosive.
- Wireless devices can cause interferences in other devices. Do not use the device in areas where medical equipment is installed.

- To ensure the R&TTE 1999/5/EC directive is complied with, the device must be at least 15 cm away from a person's body when operating.

3.5.3 Connecting the Serial Ports

The **Regesta Lite AU** can have one or several female DB9 connectors, depending on the model.

3.5.3.1 Console Connector as Serial Port (CONF connector)

It's possible to convert the console port into an RS-232 asynchronous DCE serial port. This port has the following characteristics:

- (1) DCE port
- (2) RS-232 norm
- (3) Maximum speed of 38400 bps
- (4) Only the following signals are available: RxD (pin 2), TxD (pin 3) and GND (5)
- (5) DB-9 connector

3.5.3.2 Asynchronous Serial Ports

Some models are equipped with 2 additional serial ports. These serial ports can be RS-232 or RS-485/RS-422. They have the following characteristics:

3.5.3.2.1 RS-232

- (1) DCE port
- (2) Maximum speed of 115200 bps
- (3) All control signals are available
- (4) DB-9 connector

3.5.3.2.2 RS-485/RS-422

- (1) 2/4 wires configurable through software
- (2) Bus termination configurable through software
- (3) Maximum speed of 115200 bps
- (4) DB-9 connector

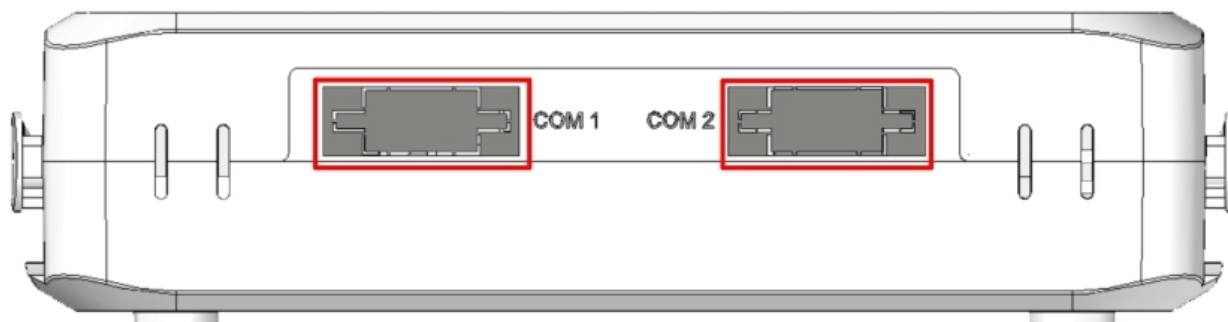


Fig. 13: Asynchronous Serial connectors

3.6 Installing the SIM card

The **Regesta Lite AU** has a Wireless WAN interface that, in order to operate, may require at least one SIM card to be inserted into the device. There are certain services (CDMA) provided by several carriers in some countries that do not require SIM cards.

The **Regesta Lite AU** has two SIM trays. Both trays are located inside the device casing and are labeled SK1 and SK2.

In installations where only one SIM card is required, we recommend that it is installed in the main SK1 tray.



Warning

Never install the SIM cards when the device is switched on.

Always disconnect the device from the main power supply before installing the SIM cards.

Always disconnect the device before removing the casing to access the trays.

When inserting the SIM cards, please protect yourself against electrostatic discharges (ESD).

Do not touch the SIM card connectors.

To access the SIM tray you need to open the upper casing of the device. To do this, undo the four screws on the top panel of the **Regesta Lite AU**:

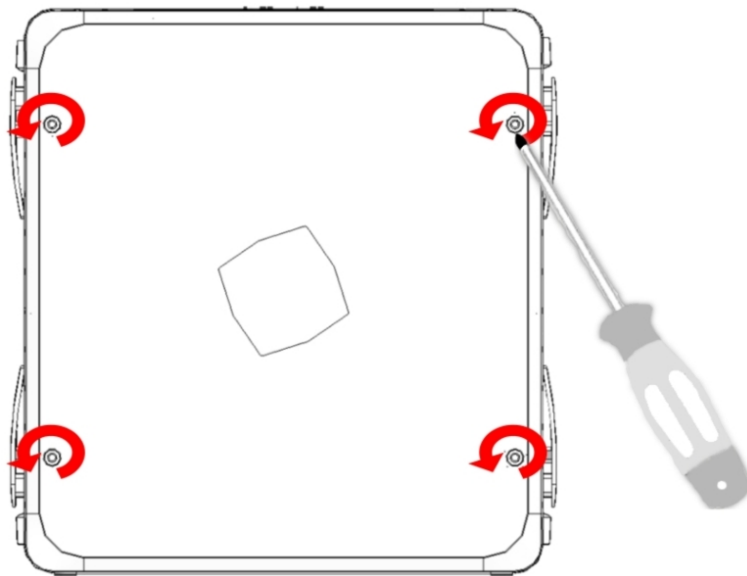


Fig. 14: **Screws on the upper casing**

3.6.1 Identifying the SIM trays

Once you have removed the upper casing, you will be able to see the different elements illustrated below.

The **Regesta Lite AU** incorporates 2 SIM cards, which allow you to execute some special configurations. One example is installing two SIM cards and using one as backup to the other. To carry out this type of configuration, you must assign a tray to each SIM (since they require different configuration parameters).

The SIM trays are identified as SK1 and SK2 i.e. socket 1 and socket 2.

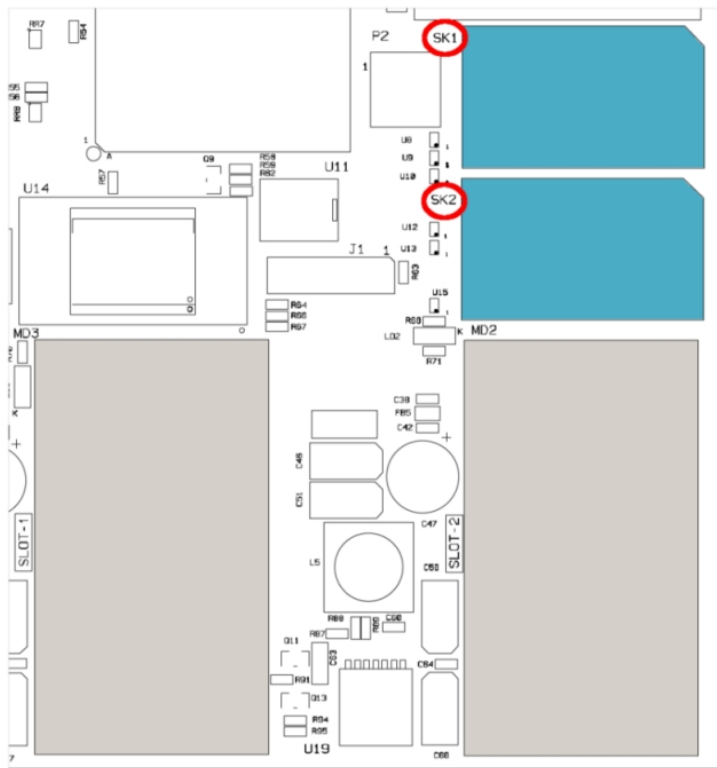


Fig. 15: Location of the SK1 and SK2 SIM trays

3.6.2 Procedure to install the SIM

In order to insert a SIM card in a tray, locate the retaining flange (fastening with OPEN and LOCK on it) so you can open the tray and place the SIM card inside. The steps are as follows:

- (1) Push the fastening in the direction indicated by the arrow with the word *OPEN*.
- (2) Open the upper part of the tray.
- (3) Fully insert the SIM card using the guides.
- (4) Return the tray to its original position
- (5) While pressing on the tray, push the fastening towards the word *LOCK* until it is firmly in place.

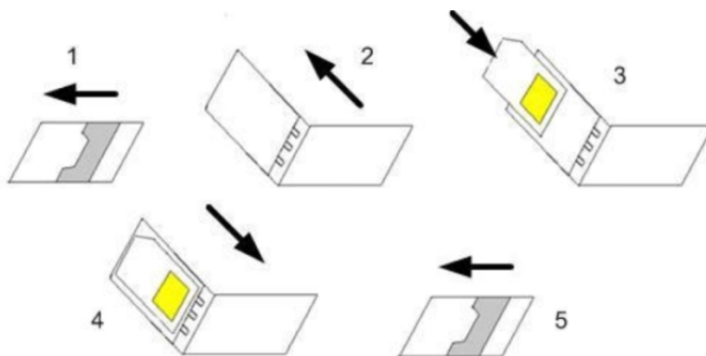


Fig. 16: Inserting the SIM in the internal tray

Appendix A Technical Information

A.1 Troubleshooting

Below, you will find a table that will help you solve problems during the installation of the router. If you cannot solve the problem, please ask your distributor for additional information.

Symptom	Solution
None of the LEDs lights up on the router.	Check the power supply to the router (power source, ON/OFF switch, main power outlet).
The local console does not respond.	<p>Check that the console cable is the right one and that it is connected to the device and the asynchronous terminal.</p> <p>Check that the terminal has the correct port configured.</p> <p>Check that the terminal configuration is 9600 8N1.</p> <p>Check that the console is not executing an events process.</p>
The local console only displays rubbish.	<p>Check that the terminal has the correct port configured.</p> <p>Check that the terminal configuration is 9600 8N1.</p>
You have forgotten the access password for the router.	Ignore the configuration through the RST button (as explained in the relevant section).
The date and time in the device are lost on when restarted.	Parameters configured through the time set command will be lost when the device restarts. Use the NTP protocol to keep the date and time configuration.
The LAN LED does not light up in green.	Check the Ethernet cable and the network connection (you may need a crossover cable).
The S LED is red.	<p>Check that the SIM card has been inserted correctly,</p> <p>or</p> <p>Check that the SIM PIN is correct,</p> <p>or</p> <p>Check that the antenna is properly installed (been screwed in correctly),</p> <p>or</p> <p>Get your technical service to check that the device is in the optimum position for the service.</p>

A.2 Updating the software

The **Regesta Lite AU** router can be updated to new releases. Please contact your distributor for further details on new releases.

There are various ways to update one of our routers. For further information, please see manual “*Dm 748-I Software Updating*”.

The software required to update one of our routers is supplied in a format known as **distribution**. This consists of a single file which contains all the files needed to update your device as well as in-depth information on the contents of the files.

The **Regesta Lite AU** router incorporates independent modules for the Wireless WAN interface. You can pick modules from different manufacturers or choose several modules from the same provider, depending on the technology used. Generally, the firmware is independent from the device's software. There is an UPGRADE file for each Wireless WAN module. Please ask your distributor for the correct UPGRADE file (according to the module in your device). The manual describing the Cellular interface (Dm 781-I) explains how to UPGRADE the module.

A.2.1 Connecting to the router

There are two ways of accessing the device CLI:

- Through the CONF connector.
- Through the Telnet protocol.

A.2.1.1 Connecting through the local console (CONF connector)

The **Regesta Lite AU** has a DB-9 female connector on the front panel known as "CONF," which provides access to the device local console. In order to configure this, you must connect the "CONF" port to an asynchronous terminal (or to a PC with terminal emulation).

- Speed: 9600 bps.
- Eight data bits.
- One stop bit.
- No parity bit.
- No type of flow control.

Connection to the configuration port can be done by joining a DB9 male connector cable to a DB9 female. If the terminal has DB25 connectors, you will need to use an additional adapter.

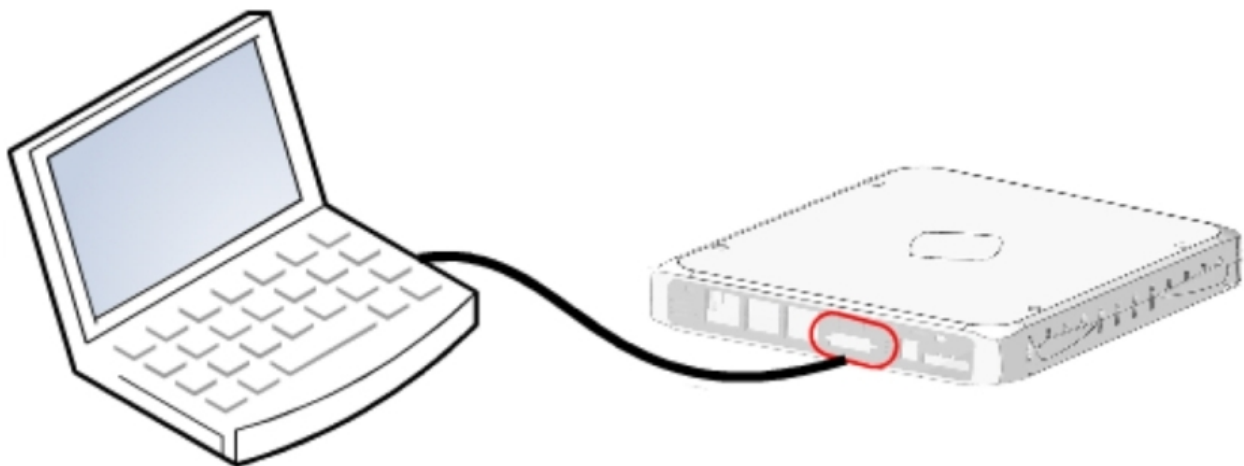


Fig. 17: Connecting for configuration

A.2.1.2 Connecting through an IP terminal (LAN1..2 connectors)

The **Regesta Lite AU** router includes a default configuration that activates if you haven't configured anything previously.

The router's default configuration establishes the following IP address and access mask:

- IP address: 192.168.1.1
- IP mask: 255.255.255.0



Note

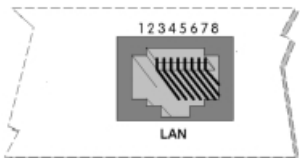
Some devices leave the factory with customized settings. This personalization can mean that the default configuration is different from the one shown above.

This initial configuration allows you to access the device configuration console through the Telnet IP protocol. To do this, follow these steps:


- Configure the IP terminal (normally a PC) Ethernet interface with an IP address within the range [192.168.1.2, 192.168.1.254] and with mask 255.255.255.0. E.g. 192.168.1.2, 255.255.255.0.
- Connect the IP terminal Ethernet interface to any of the **Regesta Lite AU** Ethernet Switch ports (LAN1..2) through the Ethernet cable (RJ45) provided.
- Initiate a Telnet session from the IP terminal to IP address 192.168.1.1 (**Regesta Lite AU** default address).
- The default configuration does not ask for credentials (user/password) to access the console.

A.3 Connectors

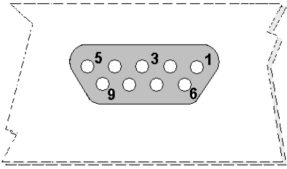
A.3.1 LAN Connector

RJ45 LAN	RJ45 PIN	LAN
	1	Tx+ (input)
	2	Tx- (input)
	3	Rx+ (output)
	4	--
	5	--
	6	Rx- (output)
	7	--
	8	--

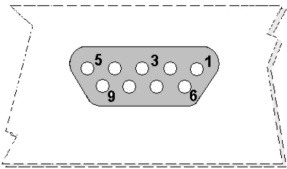
A.3.2 WWAN/Cell Connector (female)

RF	PIN	ANT
	Internal	RF in/out
	External	GND

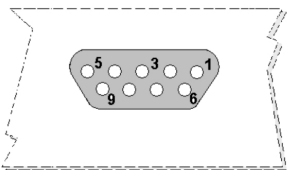
A.3.3 Configuration Connector

DB9	PIN	CONF
	1	--
	2	RxD
	3	TxD
	4	--
	5	GND
	6	--
	7	--
	8	--
	9	--

A.3.4 RS-232 Serial Port Connectors

DB9	PIN	SERIAL
	1	CD
	2	RxD
	3	TxD
	4	DTR
	5	GND
	6	DSR
	7	RTS
	8	CTS
	9	--

A.3.5 RS-485 Serial Port Connectors

DB9	PIN	SERIAL
	1	--
	2	4H_RX+
	3	2H_R/TX+_4H_TX+
	4	--
	5	GND
	6	4H_RX-
	7	--
	8	--
	9	2H_R/TX-_4H_TX-

A.4 Technical Specifications

A.4.1 LAN Interface

PROTOCOLS	Ethernet (802.3)
PORTS	2 port Switch managed with MDI/MDX auto detection.
SPEED	10/100 mbps (BaseT)
CONNECTOR	RJ45 female

A.4.2 Wireless WAN Interface

STANDARDS	GPRS, UMTS, HSDPA, HSUPA, HSPA+, LTE ... Depends on the device's wireless WAN version.
SPEED	Depends on the device's wireless WAN version. Please see the manual on the relevant module.
CONNECTOR	2 RF SMA Female
ANTENNA	Depends on the type of wireless WAN. Please see the antenna catalog for Cellular interfaces.

A.4.3 Configuration Interface

LOCAL TERMINAL	V.24 9.600-8-N-1-without flow control.
CONNECTOR	DB9 female on the device front panel.

A.4.4 RS-232 Serial Interface

STANDARDS	RS-232. Asynchronous serial port with control signals.
SPEED	From 300 to 115200 bps
CONNECTOR	DB9 female on the device rear panel. (optional)

A.4.5 RS-485 Serial Interface

STANDARDS	RS-485 2-4 wires/RS-422 configurable through software. Bus termination configurable through software.
SPEED	From 300 to 115200 bps
CONNECTOR	DB9 female on the device rear panel. (optional)

A.4.6 Power Supply

NOMINAL	24 V DC
ABSOLUTE MAXIMUM	24V +/-5 %
POWER	Max: 10 W, Average: 7.2 W

A.4.7 Power Buffer

HOLD-UP TIME	Min: 7 seconds, Max: 10 seconds
--------------	---------------------------------

A.4.8 Dimensions and weight

TYPE	Plastic ruggedized casing with the option of DIN rail mount.
LENGTH x WIDTH x HEIGHT	Without protector: 230 x 186 x 50 mm With protector: 270 x 186 x 50 mm
WEIGHT	650 gr

A.4.9 Environmental Specifications

TEMPERATURE	OPERATING NORMALLY: -10 °C to +60 °C STORED: -25° to +70 °C
RELATIVE HUMIDITY	On: 5 % to 90 %

Appendix B Safety information



Warning

The **Regesta Lite AU** is a permanently connected Class II device. According to safety regulations, the device must be installed in a rack already equipped with a thermomagnetic circuit breaker of 10 A max.

B.1 Recycling and the Environment



Please do not, under any circumstances, throw away any **Regesta Lite AU** with normal domestic waste. Ask your local town hall for information on how to correctly dispose of them in order to protect the environment against e-waste. Always respect the current laws regarding waste material. Anyone found violating the environmental laws will be subject to fines and any additional steps established by law.



All the packing materials i.e. the cardboard box, plastic and any other packaging, together with the pieces making up a **Regesta Lite AU**, must be recycled complying with the current active laws regarding recycling materials.

The below symbol with a cross over the rubbish container can be seen on the device. This means that, when a device reaches the end of its life, it must be taken to the official recycling/disposal centers where it must be disposed of in an environmentally responsible manner and separately from normal domestic waste.



B.2 Translated Safety Warnings

	<p>The electric current in power cables, telephone lines and communication cables is dangerous. To prevent electric shocks, before installing, handling or opening the equipment covers, connect and disconnect the cables following the steps set forth in Connecting on page 11 and Disconnecting on page 11.</p>
	<p>Электрический ток в кабелях и проводах может быть опасен для жизни и здоровья. Чтобы предотвратить поражение током, перед установкой оборудования, его обслуживанием и снятием панелей необходимо отсоединять кабели в соответствии с правилами, изложенными в соответствующем разделе.</p>
	<p>Le courant électrique qui circule dans les câbles d'alimentation, les lignes téléphoniques et les câbles de communication est dangereux. Afin d'éviter tout choc électrique, brancher, puis débrancher les câbles en suivant les consignes préconisées dans chaque section avant d'installer, de manipuler ou d'ouvrir les caches de l'équipement.</p>
	<p>La tensión eléctrica de los cables de alimentación, de los cables de la línea telefónica y de los cables de comunicación es peligrosa. Para evitar descargas, antes de instalar, mover o abrir las cubiertas de este equipo, conecte y desconecte los cables siguiendo el orden que se detalla en los apartados "Conectar" y "Desconectar".</p>
	<p>All interconnected communication devices should be plugged to THE SAME GROUNDED POWER OUTLET, which should at the same time be of good quality (lower than 10 ohms).</p>
	<p>Whether the workplace is provided with an uninterrupted power supply system (UPS), regulated supply or it is independent from the rest (such as lighting, etc.); it is highly recommended that all data devices should be connected to the same power source. This will avoid operating and premature aging problems of drivers and other components.</p>
	<p>Убедитесь в том, что все связанные устройства связи подключены к ОДНОЙ И ТУ ЖЕ ЗАЗЕМЛЕННОЙ ШТЕПСЕЛЬНОЙ РОЗЕТКЕ высокого качества (сопротивление не превышает 10 Ом).</p>
	<p>Проверьте, оборудовано ли рабочее место источником бесперебойного питания (ИБП), источником регулируемого питания, или оно является независимым от других систем (таким как освещение и т.п.); строго рекомендуется подключать все информационные устройства к одному источнику питания. Это поможет предотвратить эксплуатационные проблемы и преждевременное старение приводов и других деталей.</p>
	<p>Tous les dispositifs de communications interconnectés doivent être branchés sur la même prise correctement mise à la terre, qui doit être de bonne qualité (moins de 10 ohms).</p>
	<p>Soit le lieu de travail équipé d'un système d'alimentation sans interruption (ASI), alimentation régulée ou indépendante du reste (comme l'éclairage, etc), il est fortement recommandé que tous les dispositifs de données soient reliés à la même source d'alimentation. Cela permettra d'éviter des problèmes de fonctionnement et de vieillissement prématuré de drivers et d'autres composants.</p>
	<p>Todos los equipos de comunicaciones interconectados deberán estar unidos a UNA MISMA TOMA DE TIERRA, a ser posible de buena calidad (inferior a 10 ohmios).</p>
	<p>Si la instalación está dotada de un Sistema de Alimentación Ininterrumpida (SAI), alimentación estabilizada, o bien es independiente del resto (alumbrado, etc.), conecte todos</p>

	<p>los equipos de comunicaciones a la misma fuente de alimentación. Así, se ahorrará problemas de funcionamiento y envejecimiento prematuro de drivers y demás componentes.</p>
	<p>Never install the SIM cards when the device is switched on.</p> <p>Always disconnect the device from the main power supply before installing the SIM cards.</p> <p>Always disconnect the device before removing the casing to access the trays.</p> <p>When inserting the SIM cards, please protect yourself against electrostatic discharges (ESD).</p> <p>Do not touch the SIM card connectors.</p>
	<p>Никогда не устанавливайте SIM-карты, когда устройство включено.</p> <p>Перед установкой SIM-карт отключите устройство от источника питания.</p> <p>Всегда отключайте устройство перед тем, как снять корпус и извлечь лотки.</p> <p>При установке SIM-карты, пожалуйста, защитите себя от электростатических разрядов (ESD).</p> <p>Не прикасайтесь к контактам SIM-карты.</p>
	<p>N'installez jamais la carte SIM lorsque l'appareil est allumé.</p> <p>Débranchez toujours l'appareil de l'alimentation électrique principale avant d'insérer les cartes SIM.</p> <p>Débranchez toujours l'appareil avant de retirer le boîtier pour accéder aux baies.</p> <p>Lors de l'insertion de la carte SIM, protégez-vous contre les décharges électrostatiques (ESD).</p> <p>Ne touchez pas les connecteurs des cartes SIM.</p>
	<p>No instale nunca las tarjetas SIM con el equipo encendido.</p> <p>Desconecte siempre el equipo de la red antes de instalar las tarjetas SIM.</p> <p>Desconecte siempre el equipo antes de desmontar la carcasa para acceder a las bandejas.</p> <p>Al insertar las tarjetas SIM, protéjase contra descargas electroestáticas (ESD).</p> <p>No toque los conectores de las tarjetas SIM.</p>
	<p>The equipment is intended to be installed by Service Personnel and only handled by qualified personnel. If not, the device may be damaged and malfunction.</p>
	<p>Оборудование должно эксплуатироваться квалифицированным персоналом; в противном случае устройство может быть повреждено и впоследствии работать неисправно.</p>
	<p>L'équipement est destiné à être installé par le Personnel de Service et seulement manipulé par du personnel qualifié. Sinon, l'appareil risque d'être endommagé et dysfonctionner.</p>
	<p>El equipo está diseñado para ser instalado por personal del servicio técnico y su manejo debe realizarlo personal cualificado. De lo contrario, el equipo puede resultar dañado y quedar inservible.</p>



The **Regesta Lite AU** is a permanently connected Class II device. According to safety regulations, the device must be installed in a rack already equipped with a thermomagnetic circuit breaker of 10 A max.

Regesta Lite AU является постоянно подключенное устройство класса II. Стандарт безопасности устанавливает, что 10 A max термоманитная выключатель должен быть добавлен в стойке, где он будет установлен.

Le **Regesta Lite AU** est un équipement de classe II branché en permanence. La réglementation de sécurité stipule qu'il doit être installé dans une armoire munie d'un disjoncteur magnétothermique de 10 A max.

Regesta Lite AU es un equipo de Clase II permanentemente conectado. La normativa de seguridad establece que debe añadirse en el bastidor donde vaya instalado un dispositivo de desconexión tipo magnetotérmico de 10 A máx.