# Regesta PRO-ER Web Interface (Quick Configuration)

## Teldat-Dm 476-I

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# Chapter 1  Introduction

## 1.1  Introduction

The web configuration is a Regesta-PRO-ER device configuration tool permitting a quick and efficient start up.

The Web configurator is set up to automate the configuration, taking into account the device's work scenario. The configuration parameters that can be accessed through the web are those that are vital to the router operations. The rest of the parameters, hidden from the user, contain values that are adjusted to achieve the best from the operating system. The criteria used for this adjustment is the connection speed to the terminals.

> **Note**
>
> The application scenario shown in this manual is a basic configuration connection to 2G/3G where there are no tunnels or VLANs.

## 1.2  Device: Local Connection

The device already has default factory settings installed, which will activate if this has not been previously configured. You can access the web configurator by connecting an Ethernet cable, supplied with the device, to any of the switch ports and to the PC being used for the configuration tasks.



*Fig. 1: Rear view of the Regesta-PRO-ER device. Switch ports*

The default IP address accessible from any switch port is 192.168.1.1/24. The PC must configure an address pertaining to the Regesta-PRO-ER subnet (192.168.1.0/24).

Once you have guaranteed IP access to the device, you need to enter the following URL into the web browser:

*http://192.168.1.1*
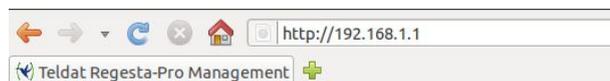


*Fig. 2: Accessing the Web configuration*

If the device access is correct, the Web configurator home page is displayed:

*Fig. 3: Homepage*

On the upper page bar you can see information on the current state of the connection: *Online/Offline*. In cases where a connection is established, this also shows the coverage level, the carrier for the SIM being used and the technology employed.



*Fig. 4: Coverage quality, carrier, technology and connection status*



*Fig. 5: Not connected*

In the center section, the configurator shows the current connection state again with a symbol together with some text on the characteristics of the web configurator and the REGESTA-PRO-ER devices.



*Fig. 6: Start page information*

The rest of the page contains information regarding the device model and the installed web firmware version.



*Fig. 7: Device model and web firmware version installed.*

To access the device configuration and monitoring, enter the user and password and click on the " *Log in*" button. Initially, the device leaves the factory without defined users.
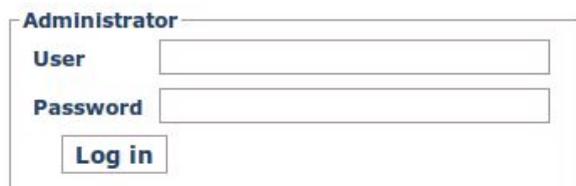
*Fig. 8: Access with user and password*

Depending on the access level assigned to the logged-in user (*root, configuration or monitoring*), he/she will have access to some pages or others.



*Fig. 9: Access through "root" level*



*Fig. 10: Access through "configuration" level*



*Fig. 11: Access through "monitoring" level*

# Chapter 2  Web Interface

## 2.1  Structure

The configuration and monitoring pages have a common structure, described below:

- **Information on the device, date and time** (shown in purple)**:** displays the name of the device, the date, the time and the time elapsed since the last restart.
- **Main menu** (red)**:** allows you to browse through the different configurator pages.
- **Status bar** (orange)**:** displays the coverage bars and their level in dBm, the carrier, the technology being currently used and the connection status.
- **Logout** *(green)*: disconnects the user, who is redirected to the application disconnection page where information on how to return to the configurator start page is given.
- **Configuration/monitoring page** (blue)**:** this is the page the user is currently accessing and which allows him to configure or monitor the different device characteristics.



*Fig. 12: Page structure*



*Fig. 13: Application disconnection page*

## 2.2  Menu Information

Once the user and password have been validated, the following page containing information on the device is displayed.



*Fig. 14: "Info" page*

The data shown is as follows:

- **Router Software version:** Device's CIT version.
- **MAC:** Ethernet physical address.
- **Router Model:** REGESTA-PRO-ER model and device license.
- **Processor:** Processor.
- **Serial number:** Device's serial number.

There are three buttons at the bottom of the page that execute the following actions:

- **Save button:** Allows you to save the changes made in the device configuration.
- **Reboot button:** Allows the user to reboot the device from the web. On clicking on this button, the user is automatically logged out and redirected to the application disconnection page.

> **Note**
>
> For the changes executed in the device configuration via the web configurator to activate, you first need
> to save the changes by clicking on the "Save" button. Then reboot the device using the reboot button.

- **Restore default configuration button:** Allows you to reestablish the router's default configuration, which automatically restarts in order to activate the changes. On reboot, the user is automatically redirected to the application disconnection page.

> **Note**
>
> If you reestablish the default configuration, you will lose all the changes made to the device's configuration.

The startpage contains the accesses the user needs in order to enter the device's configuration pages, depending on his/her access level. The following sections describe the configuration/monitoring screens in the order they appear in the bar at the top of this page.

## 2.3  Status Menu

The *Status* menu allows you to access information on the various aspects of the router status.



*Fig. 15: Status Menu*

### 2.3.1  WWAN-1 Status

Displays a summary on the parameters that characterize the module's cellular interface.

**WWAN-1 Connection Status**

■ **Connection**

| | |
|---|---|
| Register: | Home network |
| Operator: | 21407 |
| Technology: | GPRS |
| Level(dBm): | -53 |

■ **Cells**

| | MCC | MNC | LAC | CellID | BSIC | ARFCN | RX(-dBm) |
|---|---|---|---|---|---|---|---|
| Serving Cell: | 214 | 07 | b05 | 82c | 98 | 6 | 53 |
| Neighbour 1: | 214 | 07 | b05 | 82f | 112 | 550 | 33 |
| Neighbour 2: | 214 | 07 | b05 | 82b | 114 | 66 | 35 |
| Neighbour 3: | 214 | 07 | b05 | 82d | 52 | 3 | 45 |
| Neighbour 4: | 214 | 07 | b05 | 123 | 70 | 54 | 55 |
| Neighbour 5: | 214 | 07 | b05 | 126 | 2 | 548 | 57 |
| Neighbour 6: | 214 | 07 | b05 | 82e | 1 | 542 | 57 |

■ **Module Information**

| | |
|---|---|
| Manufacturer: | QISDA |
| Model: | H20 |
| Firmware: | Qisda Build Ver: 7225A-SLCAAVZA-3240,SW Ver: 1.09_1,Boot Block v |
| IMEI: | 359173506400771 |
| IMSI: | 214077302037241 |
| SIM Card ICC: | 8975506400157730225A |

■ **IP Protocol**

| | |
|---|---|
| Assigned IP: | 16.1.16.13 |

*Fig. 16: Status – Status WWAN-1*

This page is divided into four sections:

### 2.3.1.1  Connection

This provides information on the status of the radio link as well as registration in the network.

■ **Connection**

| | |
|---|---|
| Register: | Home network |
| Operator: | 21407 |
| Technology: | GPRS |
| Level(dBm): | -53 |

*Fig. 17: Status WWAN-1 – Connection*

- **Register:** Module's GSM register status in the network.
- **Operator:** Mobile telephony carrier code.
- **Technology:** Type of connection used by the device.
- **Level (dBm):** Signal reception level measured by the module.

### 2.3.1.2  Cells

This displays information on the serving and neighboring cells.

> **Note**
>
> This doesn't always show the same information. It depends on the type of module used and the techno-logy.

### 2.3.1.2.1   2G Connection



*Fig. 18: Status WWAN-1 – Cells (2G Connection)*

- **MCC (Mobile Country Code):** Code assigned to Spain within the mobile network (214).
- **MNC (Mobile Network Code):** Carrier code.
- **LAC (Location Area Code):** Local area code for the serving cell/neighbor in decimal.
- **CellID:** Serving cell/neighbor in decimal identifier.
- **BSIC (Base Station Identity Code):** Base station identifier.
- **ARFCN (Absolute Frequency Channel Number):** Selected channel number.
- **RX (-dBm):** Signal reception level.

### 2.3.1.2.2   3G Connection



*Fig. 19: Status WWAN-1 – Cells (3G connection)*

- **UARFCN (Absolute Frequency Channel Number):** Selected channel number.
- **PSC (Primary Scrambling Code):** Scrambling code for the serving cell/neighbor.
- **ECIO (-dBm):** Chip energy over the total power received.
- **RSCP (-dBm):** Power of the received signal code.

### 2.3.1.3   Module Information

This displays information on the module.



*Fig. 20: Status WWAN-1 – Module Information*

- **Manufacturer:** Module manufacturer.
- **Model:** Module model.

- **Firmware:** Module firmware version.
- **IMEI:** Module's International Mobile Equipment Identity.
- **IMSI:** International Mobile Subscriber Identity for the SIM installed in the device.
- **SIM Card ICC:** Integrated Circuit Card ID for the SIM installed in the device.

#### 2.3.1.4 IP Protocol

Displays the IP dynamically assigned by the carrier.

■IP Protocol

| | |
|---|---|
| Assigned IP: | 16.1.16.13 |

*Fig. 21: Status WWAN-1 – IP Protocol*

### 2.3.2 DMVPN connections

Not applicable.

### 2.3.3 DHCP Clients

Not applicable.

### 2.3.4 Netstat

This page displays the following information in table format:

#### 2.3.4.1 Interface Statistics

■Interfaces Statistics

| Interface | Unicast Pqts Rcv | Multicast Pqts Rcv | Bytes Received | Packets Transmitted | Bytes Transmitted |
|---|---|---|---|---|---|
| ethernet0/0 | 1761 | 3055 | 1034106 | 1800 | 921445 |
| ethernet0/1 | 0 | 0 | 0 | 0 | 0 |
| atm0/0 | 0 | 0 | 0 | 0 | 0 |
| cellular1/0 | 478 | 0 | 35564 | 239 | 6011 |
| cellular1/1 | 116 | 0 | 2524 | 126 | 8627 |
| ppp1 | 25 | 0 | 438 | 39 | 2775 |
| ppp2 | 31 | 0 | 618 | 57 | 4356 |
| gre1 | 0 | 0 | 0 | 116 | 4176 |
| gre2 | 0 | 0 | 0 | 116 | 4176 |
| gre3 | 0 | 0 | 0 | 100 | 3600 |
| gre4 | 0 | 0 | 0 | 100 | 3600 |
| loopback1 | 0 | 0 | 0 | 0 | 0 |
| ethernet0/0.5 | 0 | 0 | 0 | 0 | 0 |
| ethernet0/0.19 | 0 | 0 | 0 | 0 | 0 |
| ethernet0/0.25 | 0 | 0 | 0 | 0 | 0 |

*Fig. 22: Status – Netstat – Interface Statistics*

#### 2.3.4.2 Active TCP connections in the router

■List of TCP connections

| Local Addr | Local Port | Remote Addr | Remote Port | State |
|---|---|---|---|---|
| 0.0.0.0 | 23 | 0.0.0.0 | 0 | LISTEN |
| 0.0.0.0 | 80 | 0.0.0.0 | 0 | LISTEN |
| 0.0.0.0 | 53 | 0.0.0.0 | 0 | LISTEN |
| 0.0.0.0 | 22 | 0.0.0.0 | 0 | LISTEN |

*Fig. 23: Status – Netstat – List of TCP connections*

### 2.3.4.3 Interface IP Addresses

■ **Interface IP Addresses**

| Interface | IP Address |
|---|---|
| ppp1 | unnumbered - using global-address (16.1.16.13) |
| ppp2 | unnumbered - using global-address (17.60.12.89) |
| gre1 | 12.10.68.2/21 |
| gre2 | 15.21.168.3/21 |
| gre3 | 10.2.45.125/21 |
| gre4 | 14.8.2.67/21 |
| loopback1 | 17.60.12.89/32 |
| ethernet0/0.5 | 12.167.5.160/29 |
| ethernet0/0.19 | 12.167.45.160/29 |
| ethernet0/0.25 | 12.167.2.32/30 |
| **Special IP Address** | |
| internal-address | 0.0.0.0 |
| management-address | 17.60.12.89 |
| router-id | 0.0.0.0 |
| global-address | 17.60.12.89 |

*Fig. 24: Status – Netstat – Interface IP Addresses*

### 2.3.4.4 Active IP Routing Table

■ **Routing Table**

| Type | Dest net/Mask | Cost | Age | Next hop(s) |
|---|---|---|---|---|
| del(0)[0] | 16.0.0.0/8 | [255/16] | 200 | none |
| dir(0)[1] | 16.1.16.13/32 | [ 0/1 ] | 0 | ppp1 |
| del(0)[0] | 16.45.67.108/32 | [255/16] | 210 | none |
| del(0)[0] | 11.0.0.0/8 | [255/16] | 200 | none |
| stat(1)[0] | 11.16.80.6/32 | [ 60/1 ] | 0 | ppp1 |
| del(1)[0] | 11.16.80.143/32 | [255/16] | 210 | none |
| del(1)[0] | 11.16.80.147/32 | [255/16] | 210 | none |
| sbnt(0)[0] | 12.0.0.0/8 | [240/1 ] | 0 | none |
| dir(0)[1] | 12.167.2.32/30 | [ 0/1 ] | 0 | ethernet0/0.25 |
| dir(0)[1] | 12.167.5.160/29 | [ 0/1 ] | 0 | ethernet0/0.5 |
| dir(0)[1] | 12.167.45.160/29 | [ 0/1 ] | 0 | ethernet0/0.19 |
| sbnt(0)[0] | 17.0.0.0/8 | [240/1 ] | 0 | none |
| dir(0)[2] | 17.60.12.89/32 | [ 0/1 ] | 0 | loopback1 |

*Fig. 25: Status – Netstat – Routing Table*

## 2.3.5 Diagnostics

This executes the ping operation so that the access to a given IP address can be diagnosed. Additionally, you can execute the *traceroute* operation from the device and check the hops required to reach a certain *router/host*.

*Fig. 26: Status – Diagnostics – Ping – Traceroute*

## 2.4  Logs Menu

Allows you to access the page containing information on the 3G/3G module status evolution.



*Fig. 27: Logs Menu*

### 2.4.1  WWAN-1 Traces

Displays the information associated to the router's 3G/3G module.

*Fig. 28: Logs – Traces WWAN-1*

This is divided into two sections:

### 2.4.1.1 WWAN-1

Displays information on the type and version of the module and the firmware installed in the device.



*Fig. 29: Traces WWAN-1 – WWAN-1*

- **Module Manufacture**.
- **Module Model**.
- **Module Firmware:** Module firmware version.

### 2.4.1.2 Modem diagnostics

Allows you to monitor the commands sent to the 2G/3G module and the results by clicking on the "*Modem status*" button.

*Fig. 30: Traces WWAN-1 – Modem diagnostics*

## 2.5 System Menu

Allows you to configure the device's general parameters.
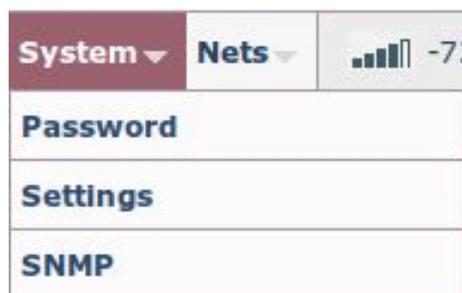


*Fig. 31: System Menu*

### 2.5.1 Password

Allows the user to modify the device access password (as long as the user has been created in local mode and the AAA feature is disabled in the configuration). To do this, you need to enter the password twice and click on the *Apply* button to save the changes.



*Fig. 32: System – Password*

When the logged-in user operates under the "*configuration*" access level, the previous page will show up differently because said user does not have enough privileges to modify the password.
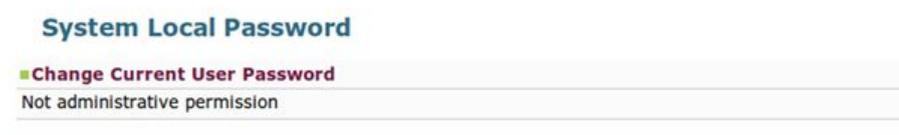


*Fig. 33: System – Password*

## 2.5.2  Settings

Here the user can configure various general parameters in the system.



*Fig. 34: System – Settings*

### 2.5.2.1  System Settings

System parameters.

• **Host Name:** Device name.

### 2.5.2.2  Time Settings

Date and time parameters.

• **NTP Server:** NTP server IP address to synchronize the device's date and time.
• **Timezone:** Hour zone the device is in.
• **Summer Time:** Activate or deactivate summer time.

### 2.5.2.3  Web Settings

Web configuration parameter.

• **HTTP Port:** Web configuration port.

Click on the *Apply* button to save the changes executed in the configuration. If you wish to delete the changes specified and recoup the data the device has, click on the *Cancel* button.

## 2.5.3  SNMP

Not applicable.

# 2.6  Nets Menu

Allows you to configure the device's network parameters.
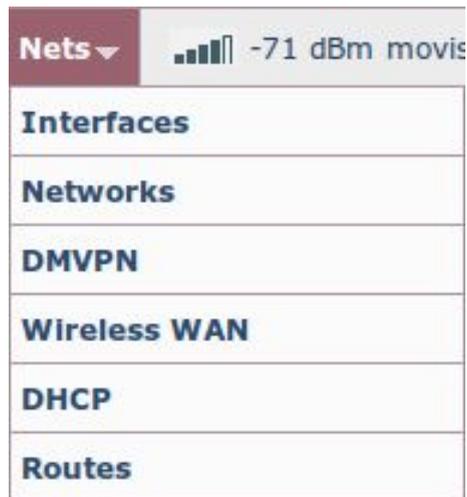
*Fig. 35: Nets Menu*

### 2.6.1 Interfaces

Not applicable.

### 2.6.2 Networks

Here you can modify the IP configuration for the Ethernet0/0 interface as this initially has a default configuration assigned. To do this, you need to select this interface from the pull-down menu, make the appropriate changes and click on the *Apply* button to save the new configuration.

If you wish to delete the changes made to the interface and recoup the data the device has, click on the *Cancel* button.



*Fig. 36: Networks – Networks Settings*

> **Note**
>
> This manual deals specifically with the given scenario. Consequently, the rest of the features available on this page are not applied here.

### 2.6.3 DMVPN

Not applicable.

### 2.6.4 Wireless WAN Configuration

Here you configure the device's 2G/3G module cellular interface, defining the connection parameters for the network.

**Wireless WAN Configuration**

■**Primary SIM Settings**

| | |
|---|---|
| Phone Number: | |
| PIN Code: | |
| APN: | operador1 |
| APN username: | usuario |
| APN password: | •••••• |

■**Secondary SIM Settings**

| | |
|---|---|
| Phone Number: | |
| PIN Code: | |
| APN: | |
| APN username: | |
| APN password: | |

■**Network Mode**

| | | |
|---|---|---|
| Network mode: | GPRS/EDGE | **Router with GPRS-EDGE Technology** |

■**SIM Changeover Settings**

☐ Configure double SIM management

| **Mode to select the main SIM:** | ◉ Main Primary SIM |
|---|---|
| | ◯ Main Secondary SIM |
| | ◯ Sequential Order |
| | ◯ Random Order |

**Supervision parameters:**

| | | |
|---|---|---|
| RSSI Threshold: | | (-113..0) dBm |
| Threshold Interval: | | (0..180) minutes |
| Recovery Interval: | | (0..65535) minutes |
| Registration Criteria Interval: | | (0..180) minutes |

**Apply  Cancel**

*Fig. 37: Nets – Wireless WAN*

### 2.6.4.1  Primary SIM Settings

In this section, you can configure the connection parameters associated to the SIM card. These parameters are as follows:

• **Phone Number:** Telephone number associated to the SIM card.

• **PIN Code:** The SIM card's PIN code.

• **APN:** Access point name used with the SIM card.

• **APN username:** User name used to access the APN with the SIM card.

• **APN password:** Password used to access the APN with the SIM card.

*Fig. 38: Wireless WAN – Primary SIM Settings*

### 2.6.4.2  Secondary SIM Settings

Not applicable.

### 2.6.4.3  Network Mode

Through a drop-down list, the user can select the type of network to connect to when dealing with a device that is compatible with *UMTS/HSDPA* technology. If the device doesn't support this technology, this field cannot be edited and its value remains as *GPRS/EDGE*.



*Fig. 39: Wireless WAN – Network Mode Technology UMTS/HSDPA*



*Fig. 40: Wireless WAN – Network Mode Technology GPRS/EDGE*

### 2.6.4.4  SIM Changeover Settings

Not applicable.

## 2.6.5  DHCP

Not applicable.

## 2.6.6  Routes

The first part of this page offers the user the option of explicitly installing a default route in the device through the PPP connection, whilst the second section displays the RIP configuration environment.

**Routes Configuration**

**Routes Settings**

| Enable Default Route by PPP: | Enable ↕ |
| --- | --- |

Apply

**RIP Settings**

| Interface: ppp1 ↕ | Selector: Send ↕ | Position: None ↕ |
| --- | --- | --- |

Add

**RIP Distribute Subnet**

| Subnets: | -- New Subnet -- ↕ |
| --- | --- |

| Subnet IP: [          ] | Subnet Mask: [          ] |
| --- | --- |

Add

**Remove RIP Configuration**

☐ Remove RIP Configuration    Remove

**RIP Configuration Interfaces**

| Interface | Send | Receive |
| --- | --- | --- |
| 192.168.213.14 | none | none |
| ppp1 | rip2-multicast | none |

**RIP Configuration Distributed Subnets**

| Subnet | Mask |
| --- | --- |
| 12.167.2.144 | 255.255.255.248 |

*Fig. 41: Nets – Routes*

### 2.6.6.1  Route Settings

In this section, the user can explicitly add a default route through the PPP connection by selecting the *Enable* option in the pull-down menu and clicking on the *Apply* button.

**Routes Settings**

| Enable Default Route by PPP: | Enable ↕ |
| --- | --- |

Apply

*Fig. 42: Routes – Routes Settings*

### 2.6.6.2  RIP Settings

This allows you to define what type of RIP packets can be sent and received for each PPP interface, or disable the RIP sending and/or listening in this interface through the *none* option. To do this, use the *Apply* button each time you configure or modify data for an interface.

**RIP Settings**

| Interface: ppp1 ↕ | Selector: Send ↕ | Position: None ↕ |
| --- | --- | --- |

Add

*Fig. 43: Routes – RIP Settings*

- **Interface:** This is configured through the pull-down menu where you can select the interface you want to configure.
- **Selector:** Here you can select the type of compatibility you wish to configure for the selected interface: *Send* or *Reception*.
- **Position:** Depending on the option selected in the *Selector* field, we can view one set of options or another:

- **Send Selector:**

  - **None:** disables the RIP packet sending in the interface.

  - **RIP-2 Multicast:** The version 2 RIP packets are sent using multicast.

- **Reception Selector:**

  - **None:** disables RIP listening in the interface.

  - **RIP-2:** only accepts version 2 RIP packets.

### 2.6.6.3  RIP Distribute Subnet

The different subnets that are going to be advertised by RIP are defined in this section.

#### 2.6.6.3.1  Adding and configuring a subnet

To add a new subnet, select the "*New Subnet*" option in the pull down menu, indicate its IP address and the subnet mask and click on the *Add* button.



*Fig. 44: Routes – RIP Distribute Subnet – Adding a subnet*

#### 2.6.6.3.2  Removing a subnet

To remove a *subnet*, select it from the pull down menu and click on the *Remove* button.



*Fig. 45: Routes – RIP Distribute Subnet – Removing a subnet*

### 2.6.6.4  Remove RIP Configuration

This option lets you remove all the configuration defined by RIP. To execute this, the user needs to click on the *Remove* button and confirm this action.



*Fig. 46: Routes – Remove RIP Configuration*

### 2.6.6.5  RIP Configuration

To simplify the user tasks there are two lists at the foot of the page where the sending and the reception parameters through the interface and the subinterfaces advertised by RIP are displayed respectively.

**RIP Configuration Interfaces**

| Interface | Send | Receive |
|---|---|---|
| 192.168.213.14 | none | none |
| ppp1 | rip2-multicast | none |

**RIP Configuration Distributed Subnets**

| Subnet | Mask |
|---|---|
| 12.167.2.144 | 255.255.255.248 |

*Fig. 47: Routes –RIP Configuration*