



# Reporte de Evidencias

Proyecto MT - Marzo 2025





# Introducción

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Este documento contiene las evidencias recopiladas durante el proyecto MT.





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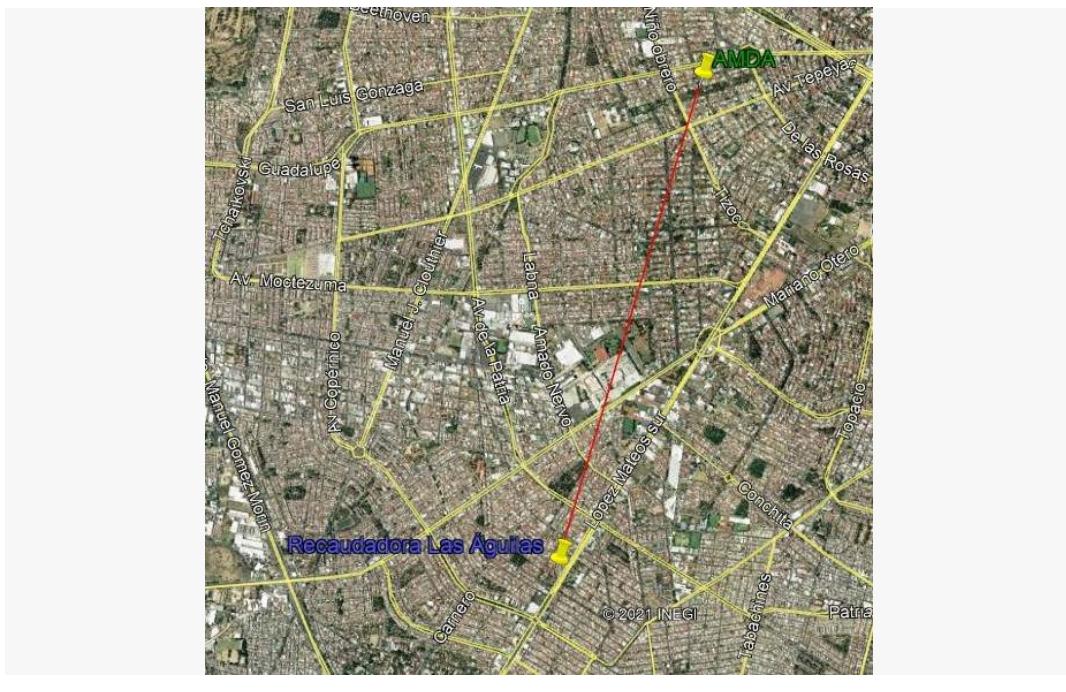
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# Ubicación



RED\_DIGITAL



AMDA

## Ubicación



LAS\_ÁGUILAS



# Inventario

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Inventario.pdf

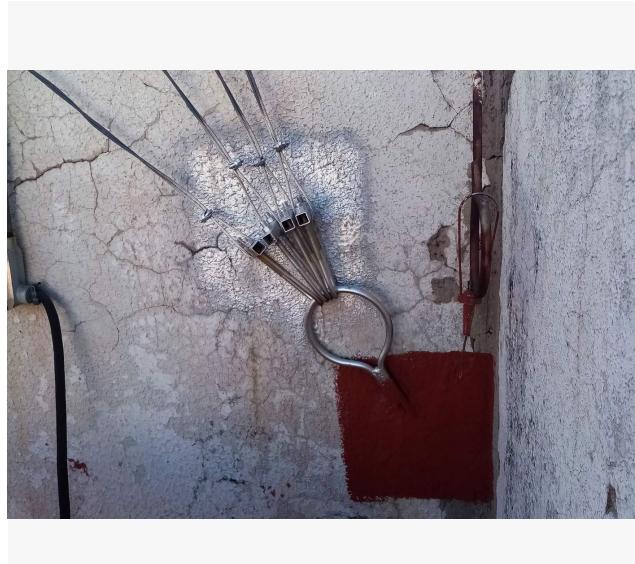
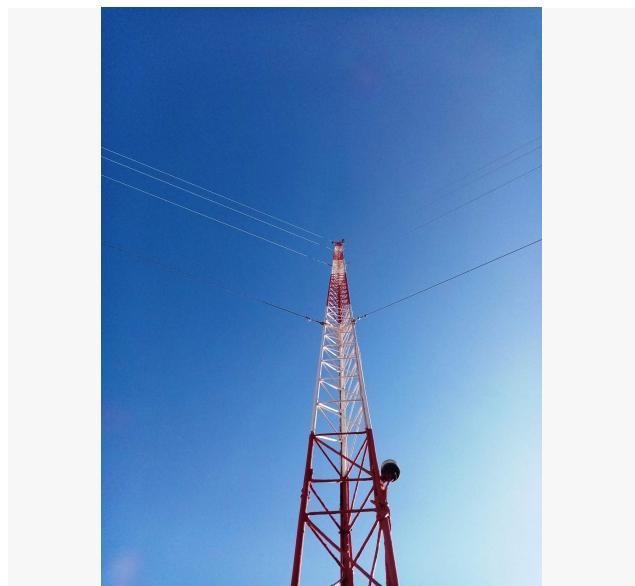


# Mantenimiento

## Equipos AMDA

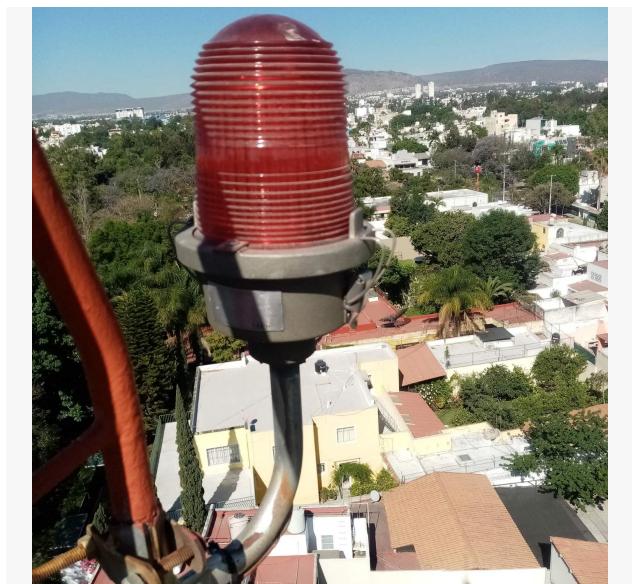
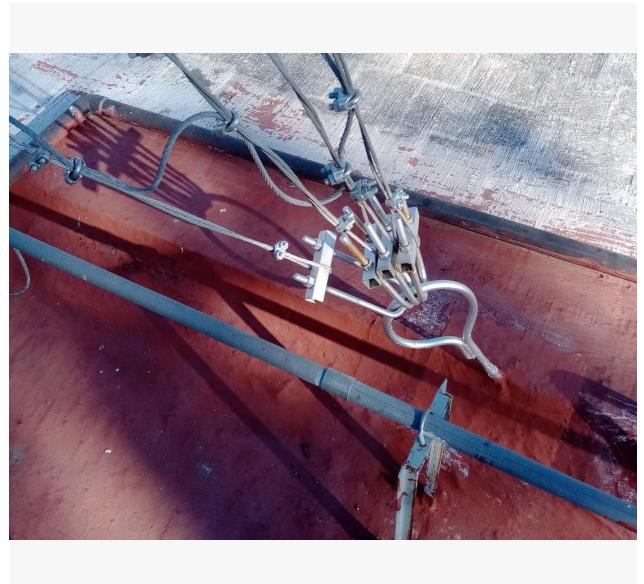
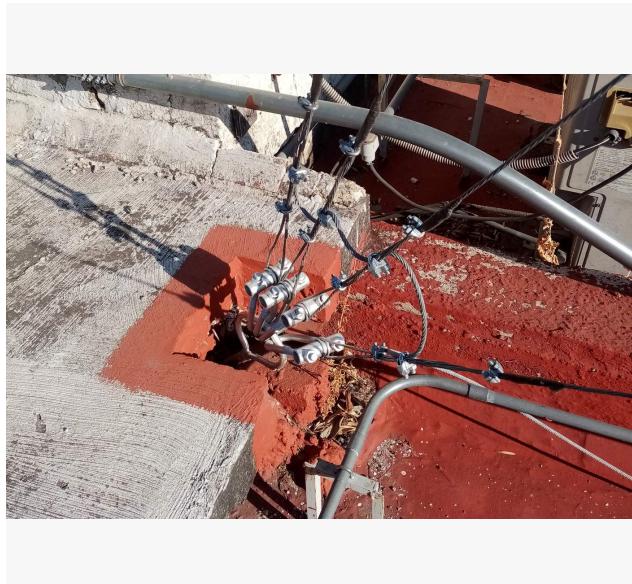
### Mantenimiento a torre

#### Previo a mtto



# Mantenimiento

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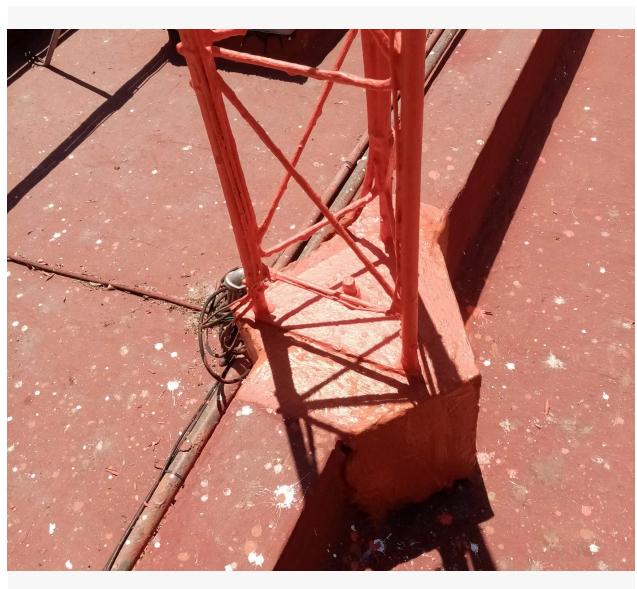
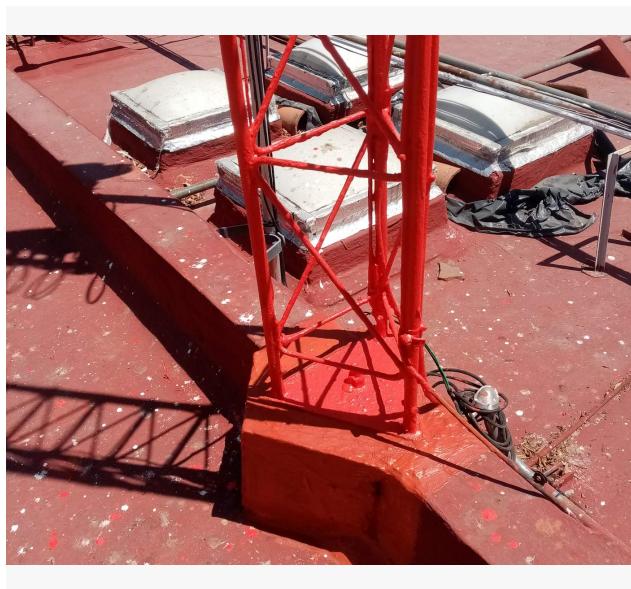
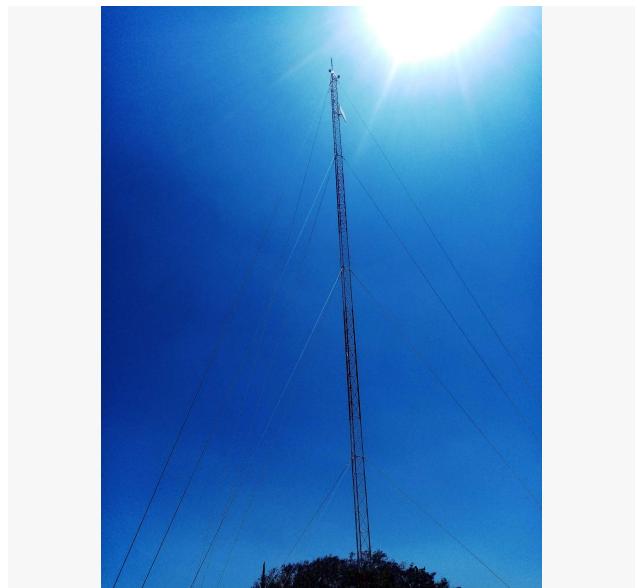


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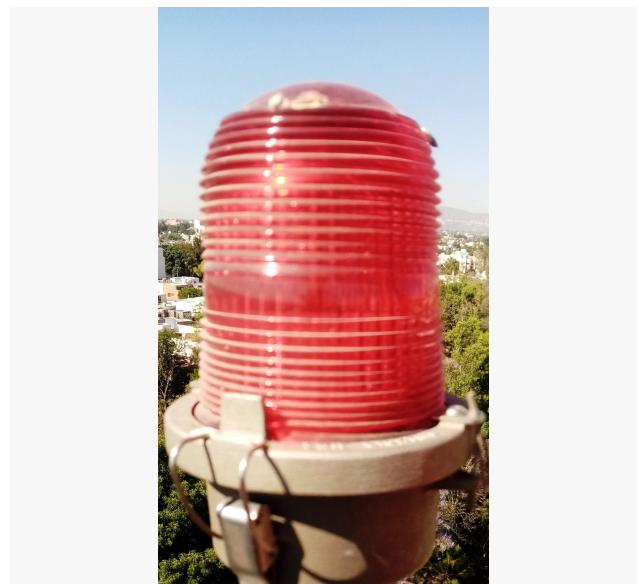
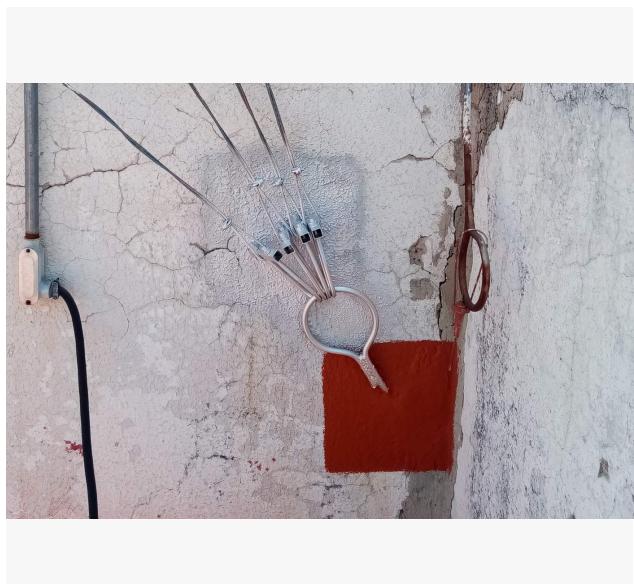
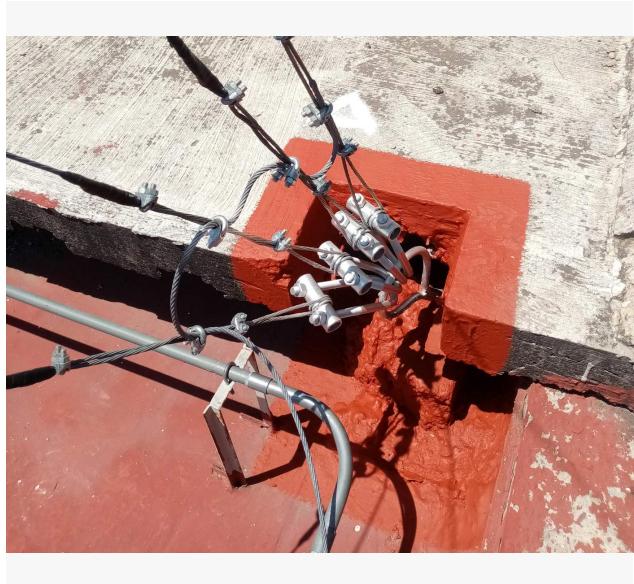


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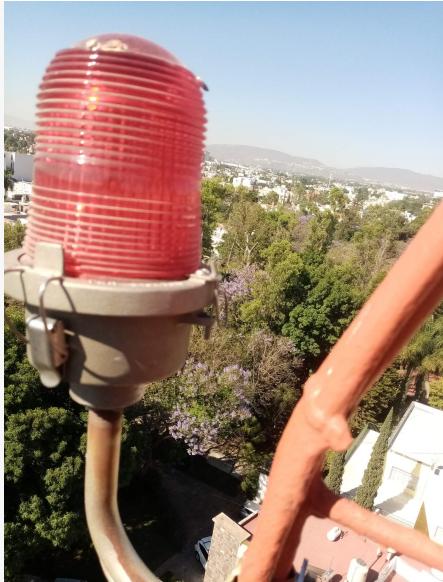
## Posterior a mtto



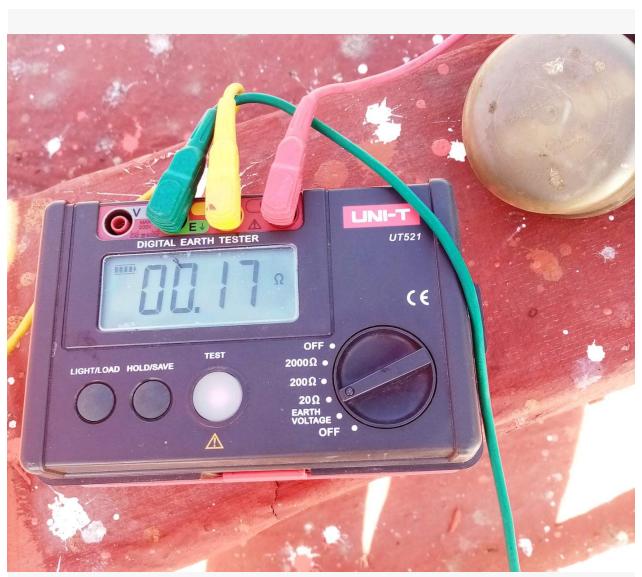
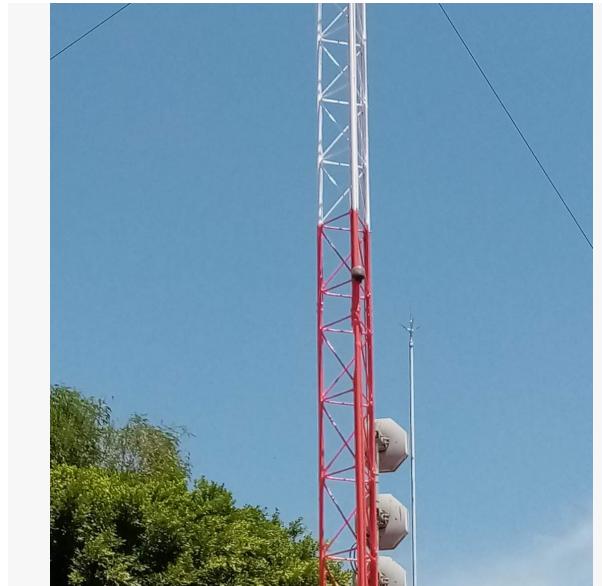
# Mantenimiento



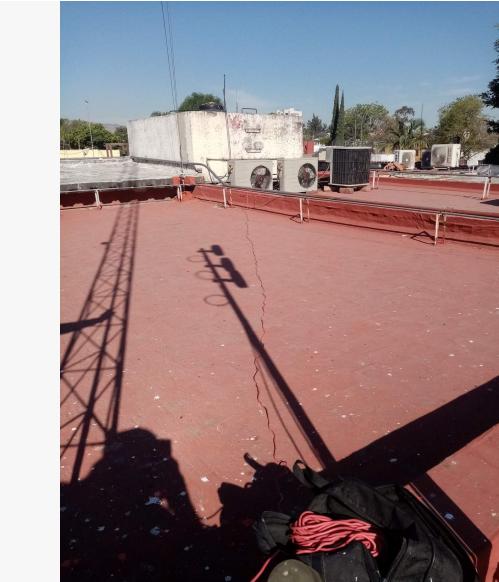
# Mantenimiento



# Mantenimiento



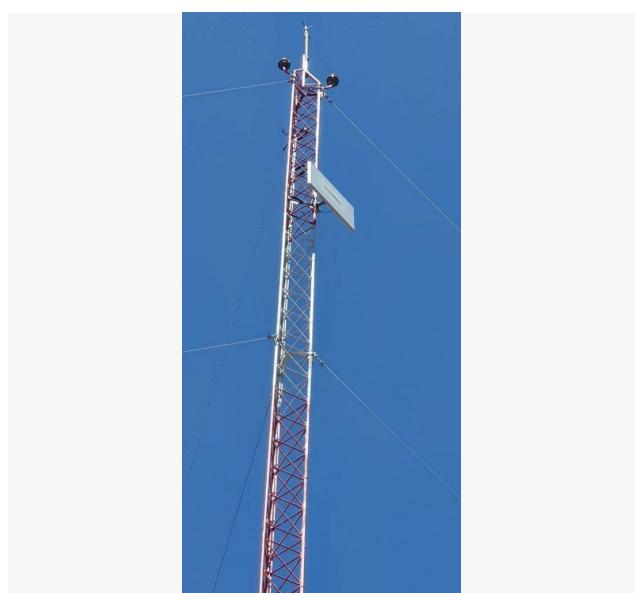
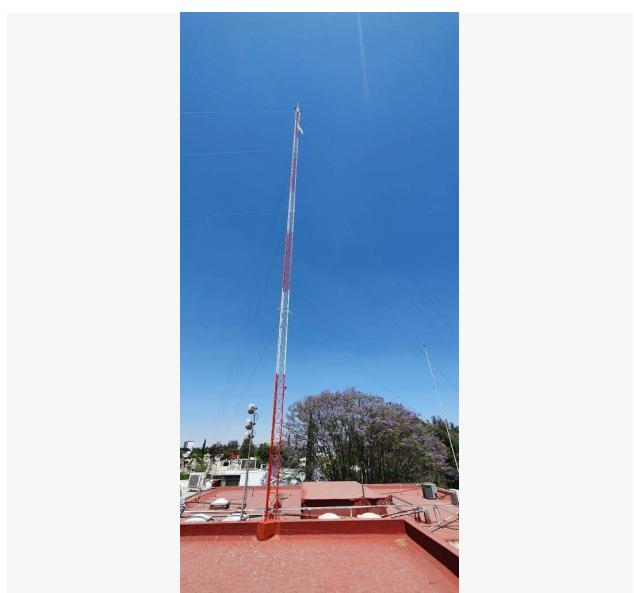
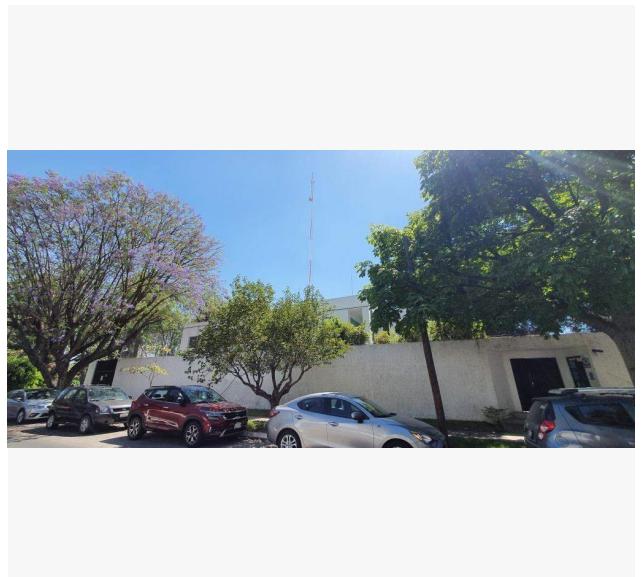
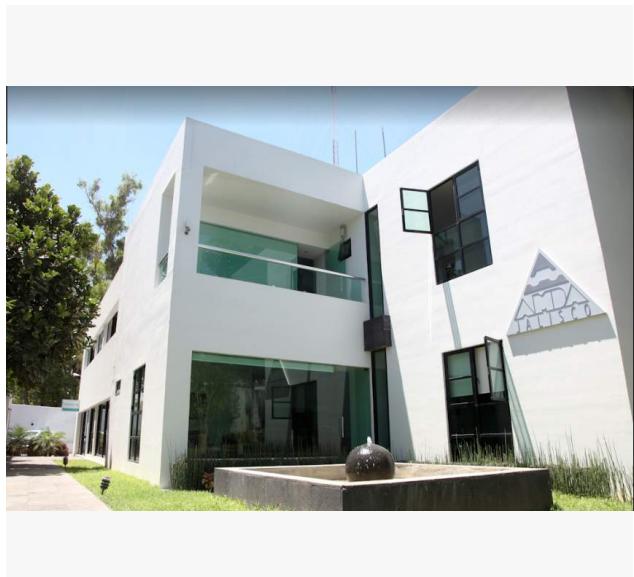
# Mantenimiento



# Mantenimiento

## Mantenimiento a enlace

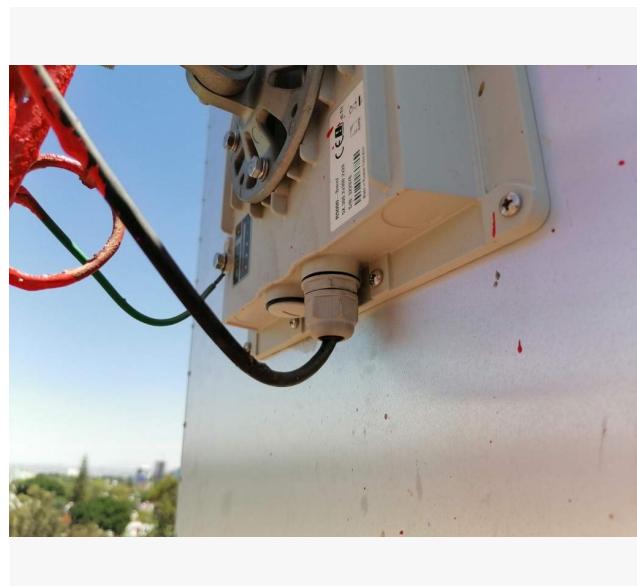
Previo a mtto



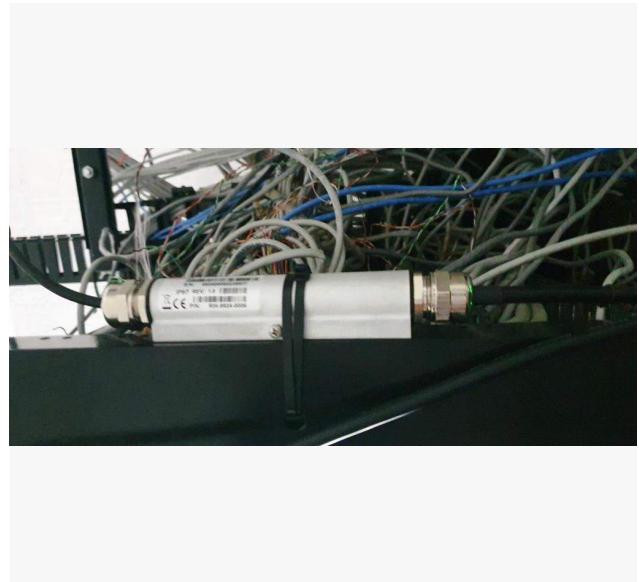
# Mantenimiento



# Mantenimiento

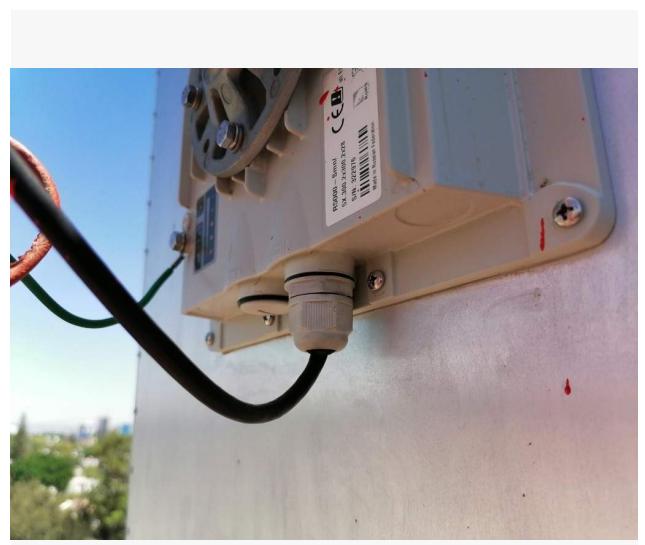


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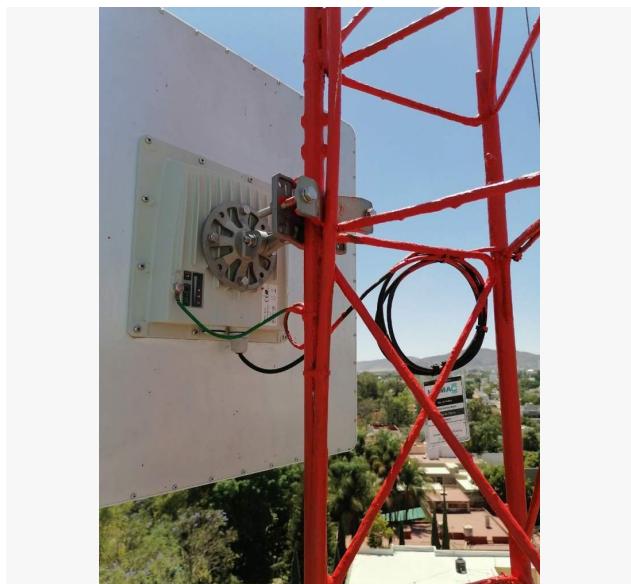


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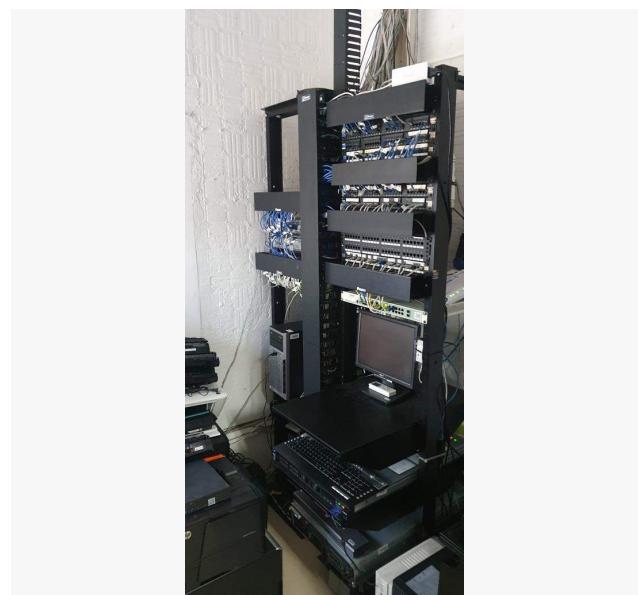
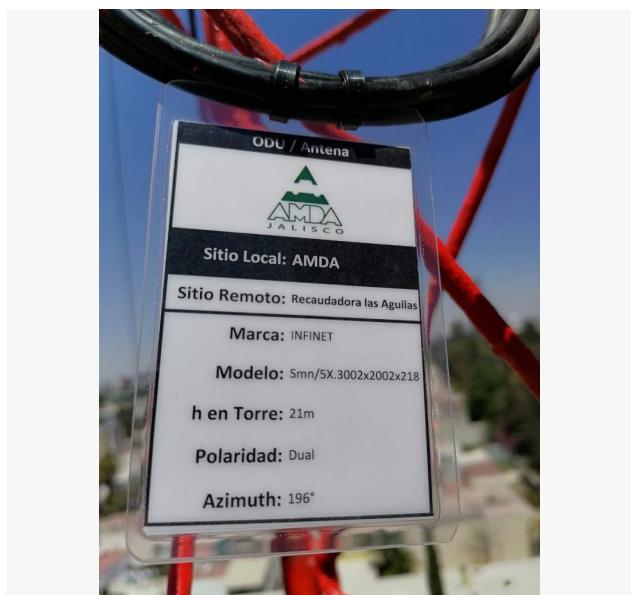
## Posterior a mtto



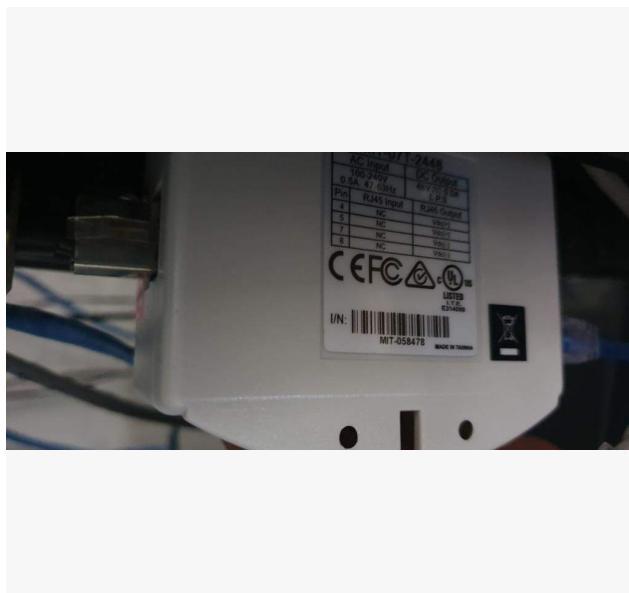
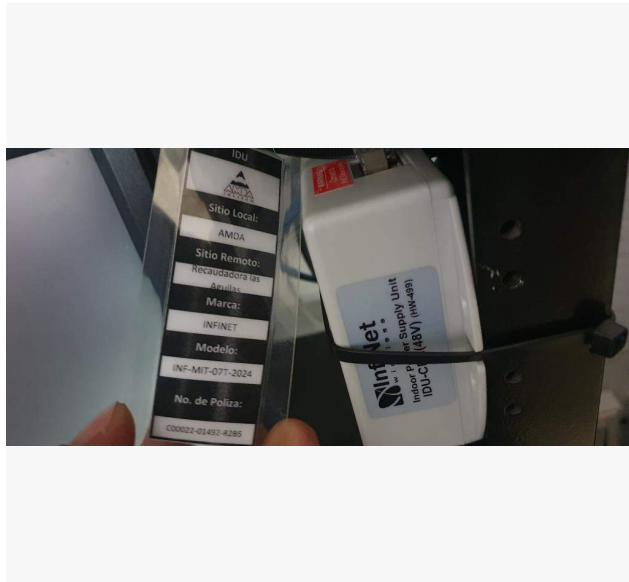
# Mantenimiento



# Mantenimiento

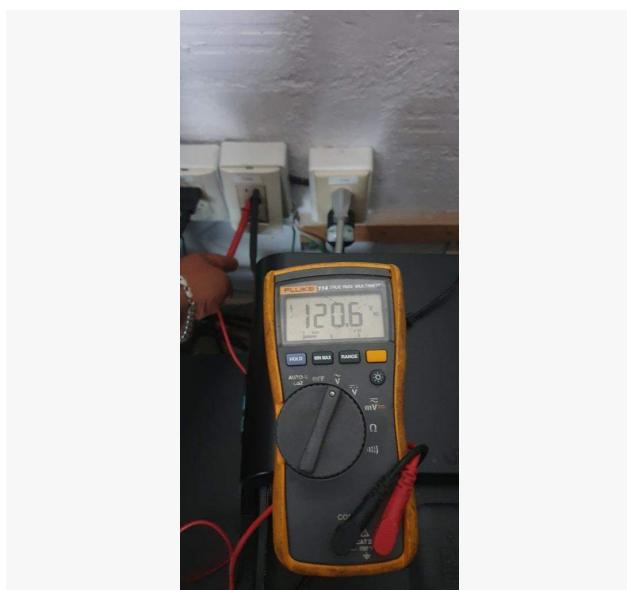
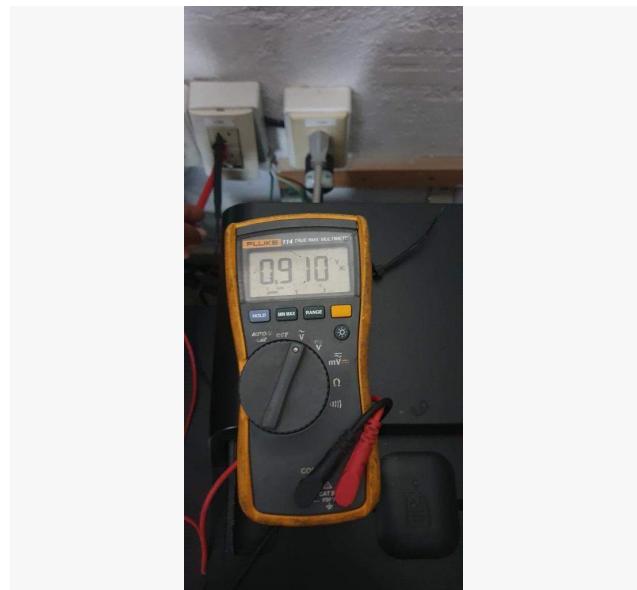
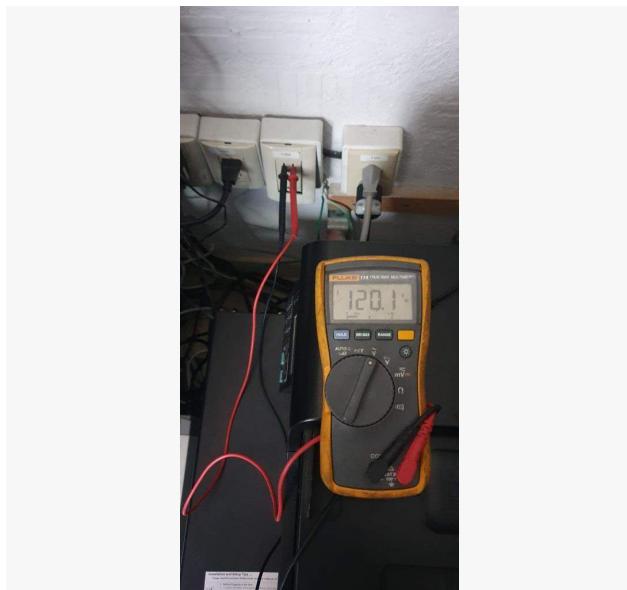


# Mantenimiento



# Mantenimiento

## Mediciones de voltaje





# Mantenimiento

## Pantallas

The screenshot shows the InfiNet wireless Device Status interface. At the top, it displays system statistics: CPU 3%, Memory 49687K / 124597K, and Flash 4431K / 15687K. The uptime is listed as 151 days 21:44:05. Below this is the H11S01-MINTv1.90.42 software version. The main content area is divided into sections:

- Interface Statistics:** Shows traffic for interfaces eth0, eth1, rf5\_0, and svr1. For example, eth0 has an Up status, 100 Mbps Full Duplex mode, and 803212 / 304488 packets Rx/Tx.
- Links Statistics on rf5\_0 (AMDA ID: 22976):** Displays one link to RECAUDADORA LAS AGUILAS with Node ID 22974, distance 5 km, Tx Power 23/25 dBm, SNR 30/38 dB, and BER 39/104.
- Switch Statistics:** Shows a single switch node with status Started.

At the bottom, there are refresh and auto-refresh options, and a "Show System Log" button.

The screenshot shows the InfiNet wireless Basic Settings interface. It includes sections for:

- System Settings:** Fields for Device Name (AMDA), User Name (root), Password, Confirm Password, Start SNTP (unchecked), SNTP Server (unchecked), SNTP IP Address (192.168.1.1), Time Zone, Latitude, Longitude, VED Interface language (English), and HTTPS only (unchecked).
- Network Settings:** Includes Link Settings, Static Links, MAC Switch, IP Firewall, SNMP, and QoS Options.

A "Please setup system Login and Password!" message is prominently displayed at the top of the page.



# Mantenimiento

The screenshot shows the InfiNet wireless Device Status interface. The main menu includes Device Status, Basic Settings, Maintenance, Spectrum Analyzer, DSS, and Command Line. A message at the top says "Please setup system Login and Password!". The Network Settings section displays the following interface configurations:

- eth0:** IP 10.10.10.2, Up: checked, Description: [empty], DHCP: unchecked, IPv4 MTU: 1500, Mode: auto. Subnet mask: 10.10.10.24.
- eth1:** IP [empty], Up: checked, Description: [empty], DHCP: unchecked, IPv4 MTU: 1500, Mode: auto. Subnet mask: [empty].
- rf5.0:** IP [empty], Up: checked, Description: [empty], DHCP: unchecked, IPv4 MTU: 1500, Mode: auto. Subnet mask: [empty].
- svi1:** IP 10.50.2.3, Up: checked, Description: L2 Management Interface, DHCP: checked, IPv4 MTU: 1500, Switch group: 1. Subnet mask: 10.50.2.24.

Buttons at the bottom include Create PRF, Create VLAN, Create LAG, Create SVI, Create Tunnel, and Create Tap.

The screenshot shows the InfiNet wireless Link Settings interface for the rf5.0 profile. The General Settings section contains the following parameters:

- Enable link: checked
- Type: Slave, MultIBS: unchecked
- Mode: Fixed
- Radar Detection: unchecked
- Tx Power (dBm): 25, Auto: checked, Range: -0 to +
- Node Name: AMDA
- Scrambling: unchecked
- Trap gateway: unchecked
- Switch Border: unchecked
- Network Entry SNR (dB): Low 0, High 2
- RX Attenuation (dB): [empty]
- Multicast Mode: Multicast
- Authentication Mode: public
- ODR: Disabled
- DTA: Passive
- Log Level: normal

The right panel shows the configuration for profile 1:

- Disable profile: unchecked
- Channel Width (MHz): 20
- Frequency (MHz): 5010
- Frequency Range List: [empty]
- Tx Bitrate (Kbps): Max, Auto: checked, Range: 0 to +
- Channel Type: Dual, Greenfield: checked
- Network SID: 10101010
- Node ID: 22976
- Security Key: [empty]

Buttons at the bottom include Copy and Remove.



# Mantenimiento

Firmware

Firmware Version: H11S01-MINTv1.90.42  
Build Date: Jan 31 2020 16:57:50  
Serial Number: 322976  
Part Number: R5000-Smn/5X.300.2x300.2x28  
Platform: Processor: MPC8309 400 MHz  
Uptime: 151 days 21:44:31  
Last Reboot Reason: power-on reset

Check Latest Release | Check Latest Beta

Upload

License: [Seleccionar archivo] Ningún archivo seleccionado [X]  
Firmware: [Seleccionar archivo] Ningún archivo seleccionado [X] OTA:  Neighbors only:   
Configuration: [Seleccionar archivo] Ningún archivo seleccionado [X]  
SSL Certificate: [Seleccionar archivo] Ningún archivo seleccionado [X]

Download

Download License | Download Firmware | Download Configuration

Reboot | Restore Factory Settings | Delete SSL Certificate | View Current License | View Current Configuration | Create Diagnostic Card

Please setup system Login and Password!

Firmware

Licence Factory License granted at 21/04/2020 16:23:41  
Device ID: SN 322976  
PN: R5000-Smn/5X.300.2x300.2x28  
Production Date: 21 Apr 2020 16:23:41 YEKT  
Operational parameters:  
1/5.0 interface parameters  
Maximum Data Rate: 300 Mbps  
Available Channel Widths: 5 MHz 10 MHz 15 MHz 20 MHz  
40 MHz channel width is available  
Link Protection: Enabled  
Power levels: 63.200.300 mW  
Power levels: 5.0 7.4 14.0 18.0 23.0 25.0 dBm  
Regulability domain: FCC  
Supported Frequencies: 4900 - 6040 MHz

Upload

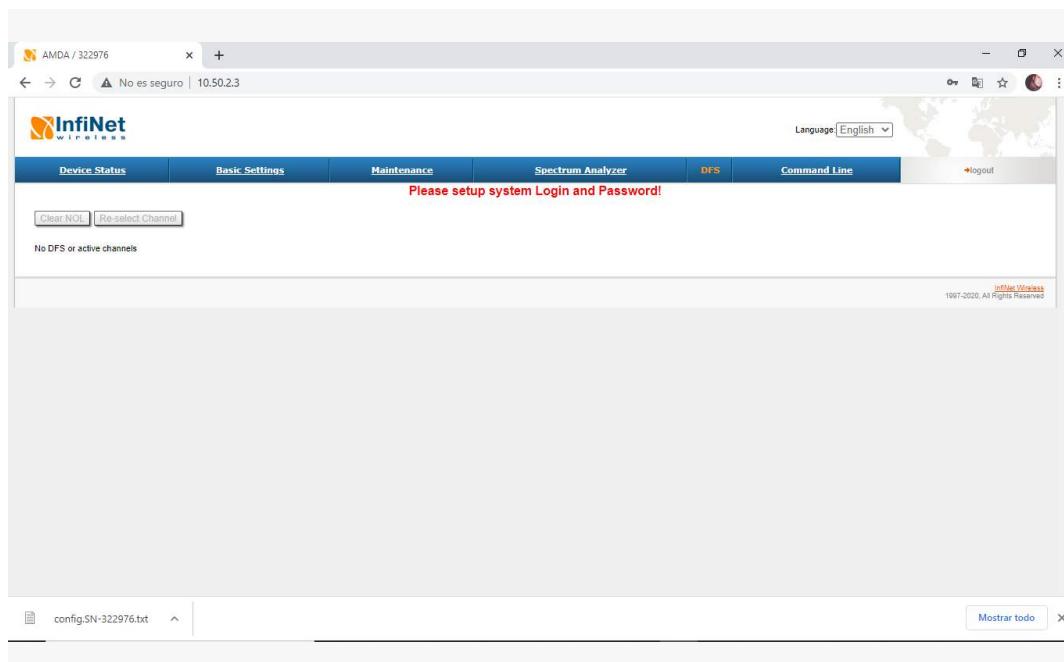
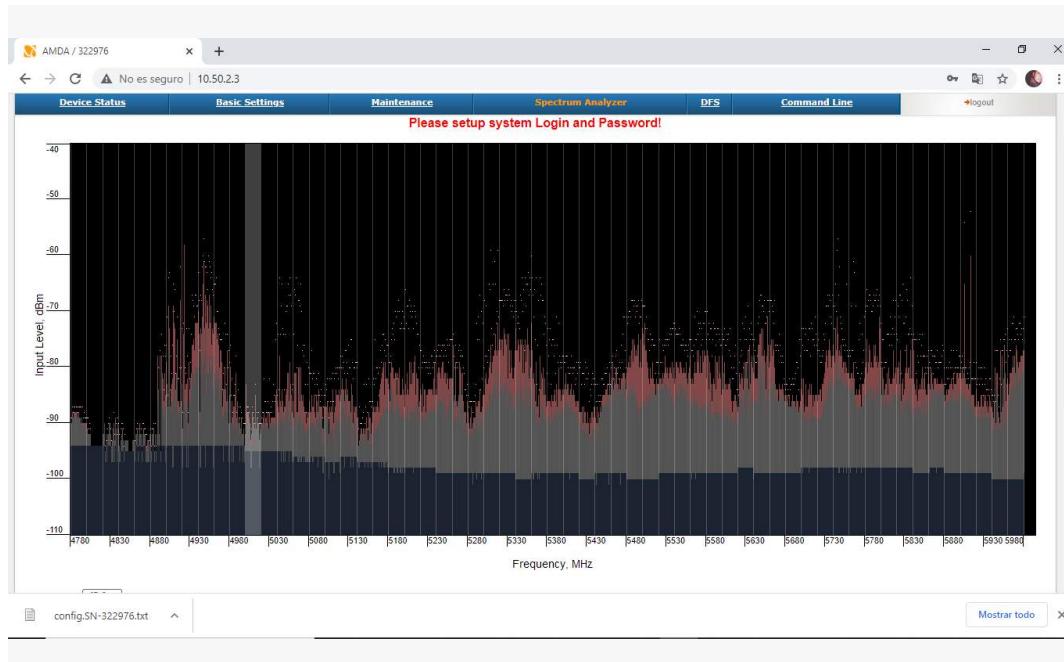
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Configuration: [Seleccionar archivo] Ningún archivo seleccionado [X]  
SSL Certificate: [Seleccionar archivo] Ningún archivo seleccionado [X]

Close

Reboot | Restore Factory Settings | Delete SSL Certificate | View Current License | View Current Configuration | Create Diagnostic Card



# Mantenimiento





# Mantenimiento

AMD / 322976    +

No es seguro | 10.50.2.3

InfiNet wireless

Device Status Basic Settings Maintenance Spectrum Analyzer DSS Command Line Logout

Please setup system Login and Password!

CPU 3% Memory 49687K / 124597K Flash 4431K / 15687K

Uptime: 151 days 21:44:50 H11S01-MINTv1.90.42

Interface Statistics

Interface	MAC Address	Status	Mode	Packets Rx/Tx	Errors Rx/Tx	Load (Kbps) Rx/Tx	Load (pps) Rx/Tx
eth0	00043504eda0	Up	100 Mbps Full Duplex	803220 / 304500	0 / 0	67 / 12	3 / 4
eth1	00043514ea00	Up	--	0 / 0	0 / 0	0 / 0	0 / 0
rfs 0	00043524eda0	Up	130 Mbps / 5010 MHz / 20 MHz / 25 dBm / GF / DFS ONLY	159656 / 331695	0 / 1	9 / 9	11 / 11
svi1 L2 Management Interface	02043504eda0	Up	Switch Group #1	1020 / 1525	0 / 0	6 / 12	3 / 4

Reset All Counters Graphs

Links Statistics on rfs.0 (AMDA ID: 22976) Links: 1

Noise: -94 dBm ATPC: On Autobitrates: On Polling: OFF

Status	MAC Address	Name	Node ID	Distance (Km)	Tx Power (dBm) Rx/Tx	SNR (dB) Rx/Tx	Level (dB) Rx/Tx	Bilrate Rx/Tx	Retries (%) Rx/Tx	Load (Kbps) Rx/Tx	Load (pps) Rx/Tx
00 05 10	00043524eda0	RECAUDADORA LAS AGUILAS	22974	5	23 / 25	30 / 38	31 / 18	39 / 104	0 / 0	3 / 3	3 / 3

Route Map Graphs

Switch Statistics Status: Started

Refresh Auto Refresh:  Auto Refresh Time (sec): [1] Show System Log

config.SN-322976.txt Mostrar todo

AMD / 322976    +

No es seguro | 10.50.2.3

InfiNet wireless

Device Status Basic Settings Maintenance Spectrum Analyzer DSS Command Line Logout

Antenna Alignment Tool

Alignment Test (Interface rfs.0, MAC 00043524eda0, Neighbor AMDA)

Local Remote

Input Level dB Cross Talk dB Input Level dB Cross Talk dB

RSSI, dBm	RSSI, dBm	CINR, dB	CINR, dB	Crosstalk, dB	Crosstalk, dB	EVM, dB	EVM, dB	Retries, %	Retries, %	Tx bitrate, Kbps	Tx bitrate, Kbps
-48	-54	41	35	-28	-16	-24	-25	0	0	39000 (MCS10)	104000 (MCS13)

INTV1.90.42

Load (pps) Rx/Tx: 1 / 2, 0 / 0, 18 / 18, 8 / 13

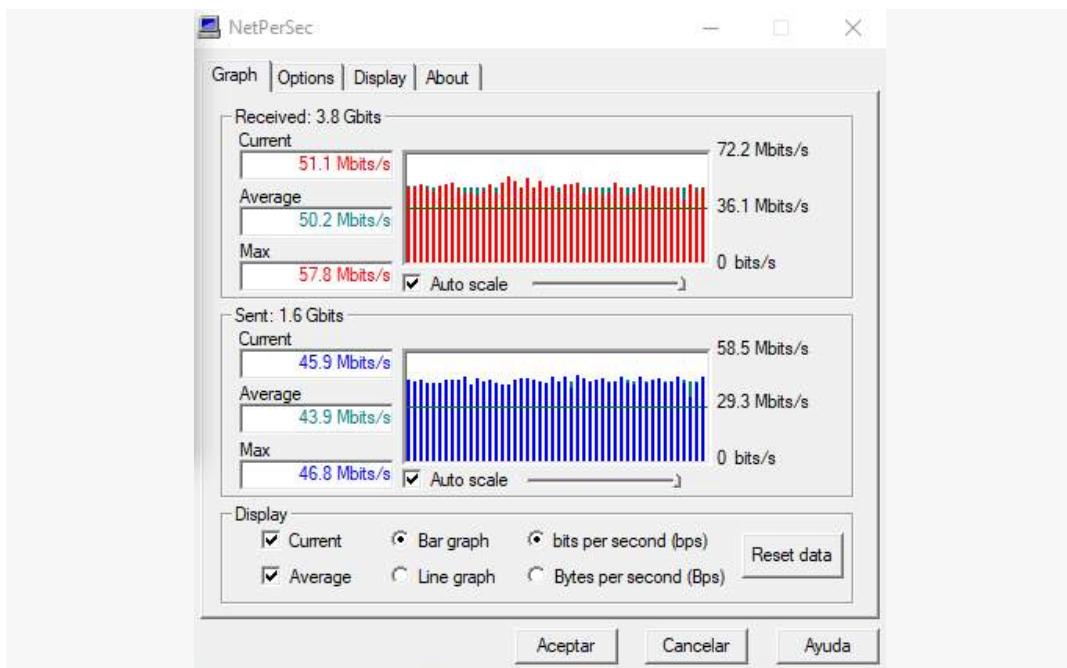
Load (pps) Rx/Tx: 5 / 6

Route Map Graphs

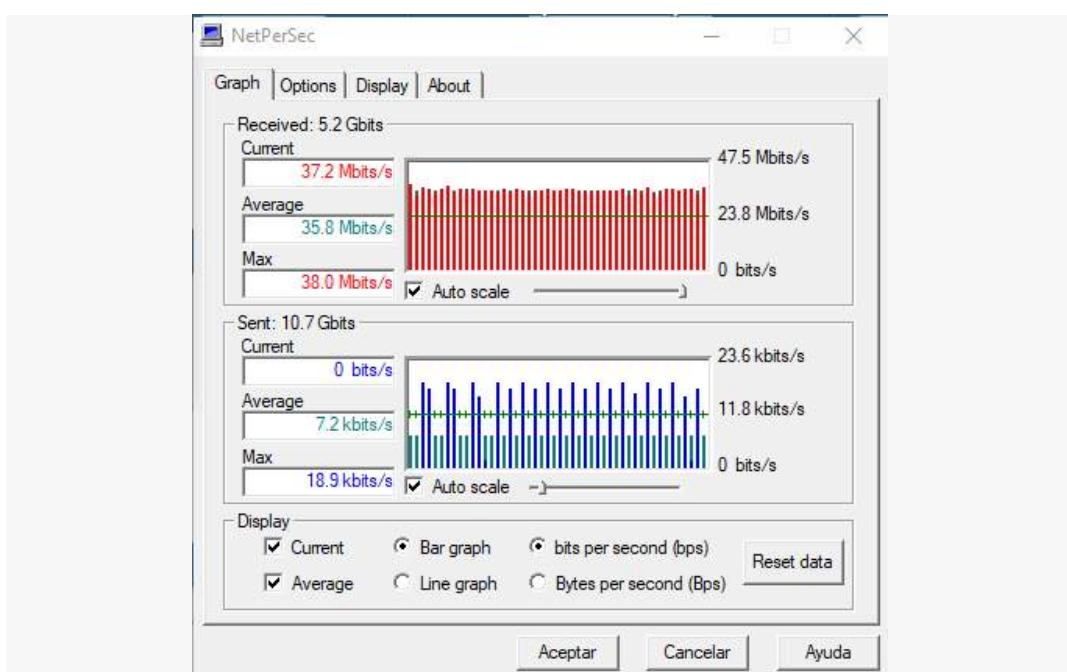
config.SN-322976.txt Mostrar todo

# Mantenimiento

## Pruebas



FULL

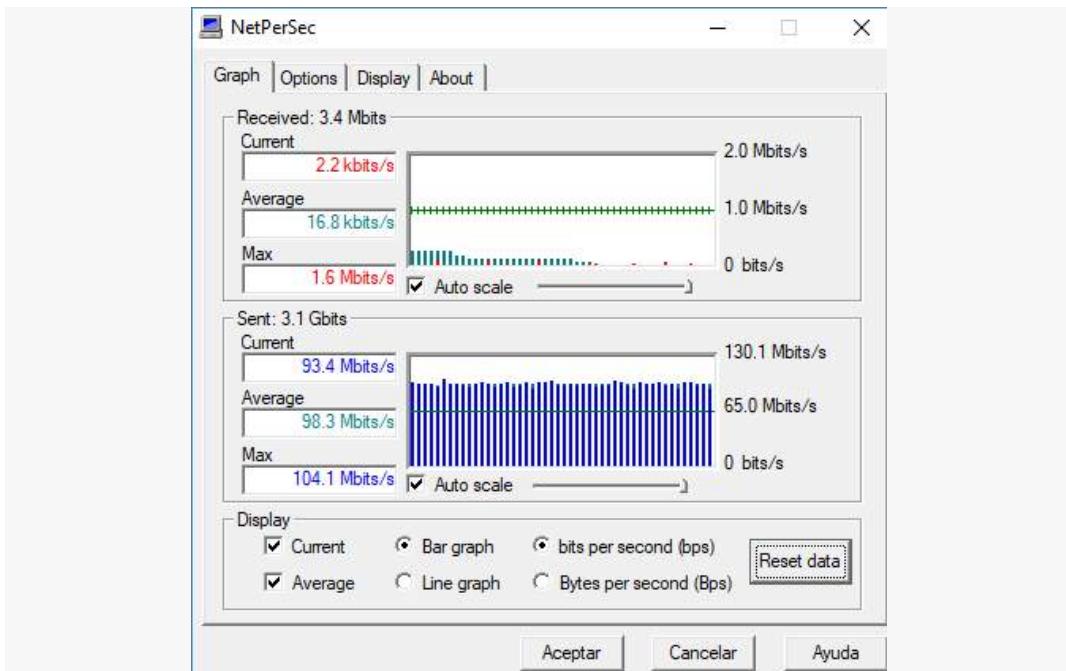


RX





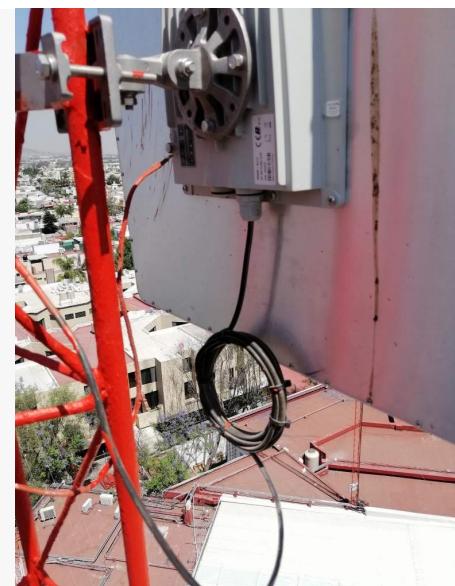
# Mantenimiento



TX

# Mantenimiento

**Equipos Las Águilas**  
**Mantenimiento a enlace**  
**Previo a mtto**



# Mantenimiento

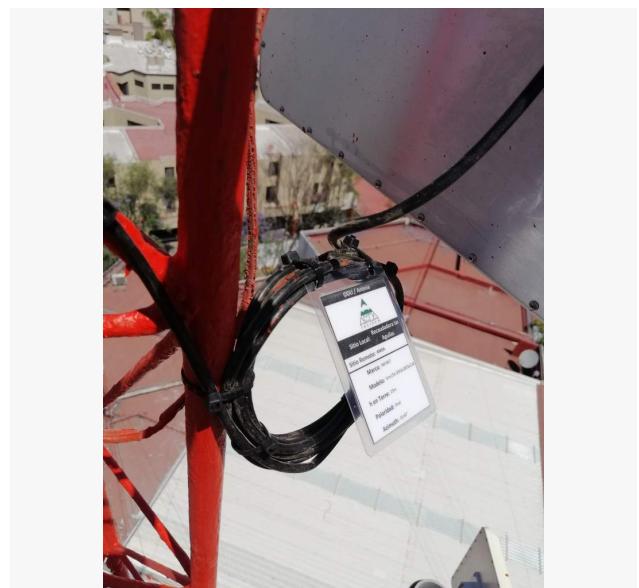
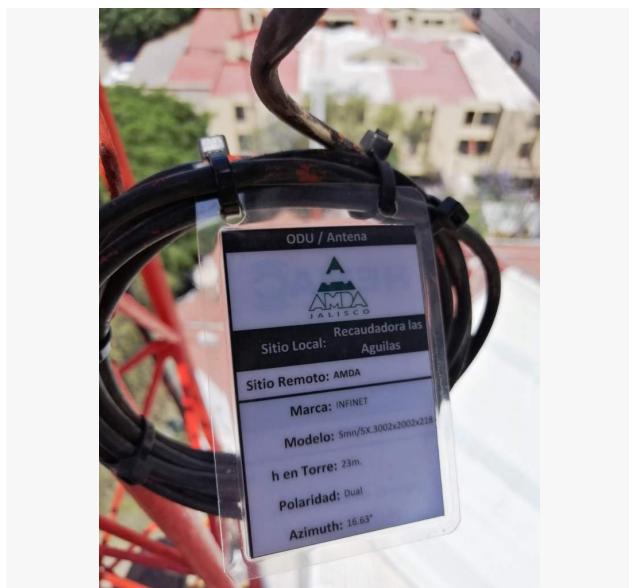
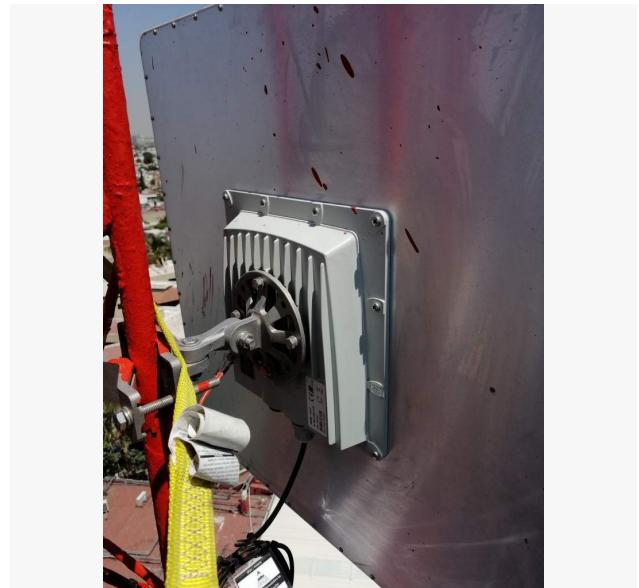
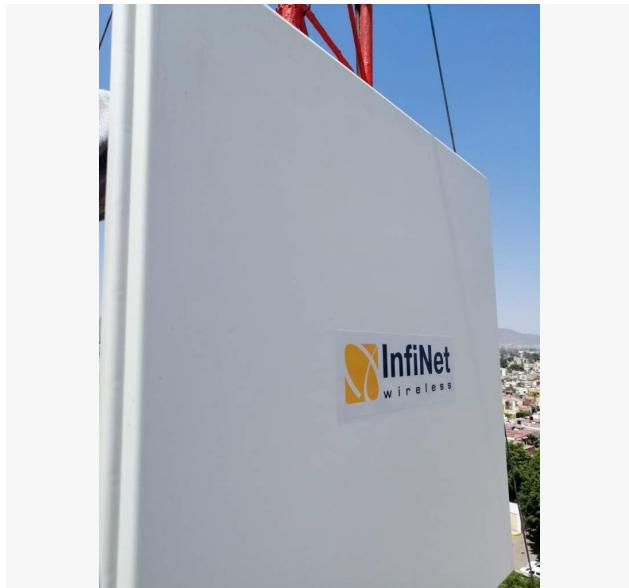


# Mantenimiento

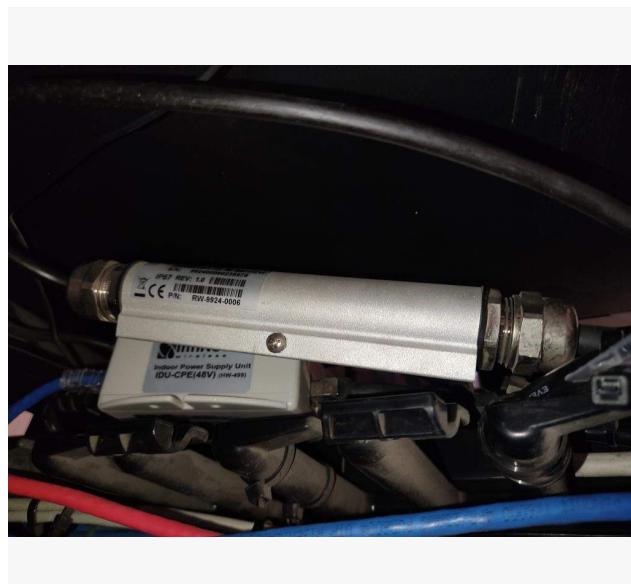
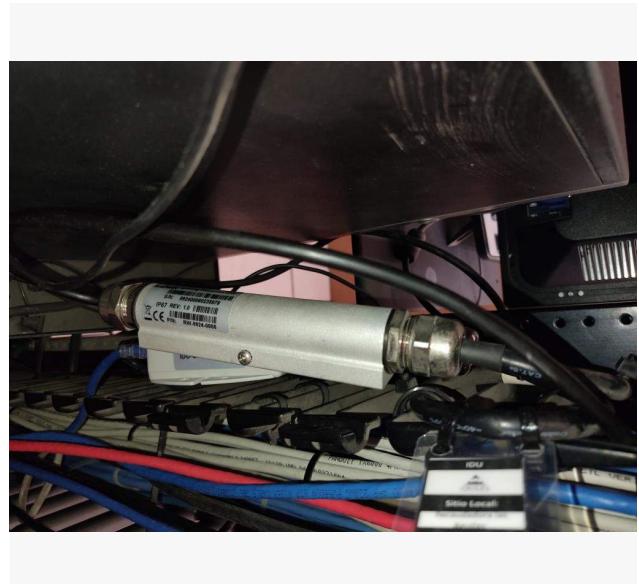


# Mantenimiento

## Posterior a mtto

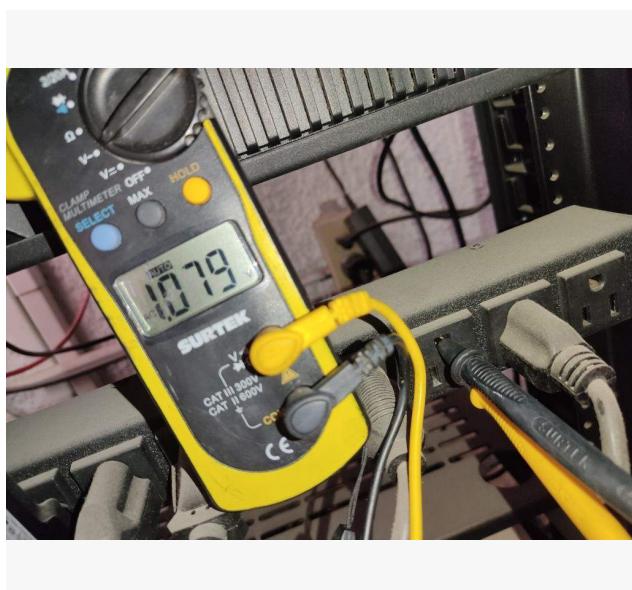
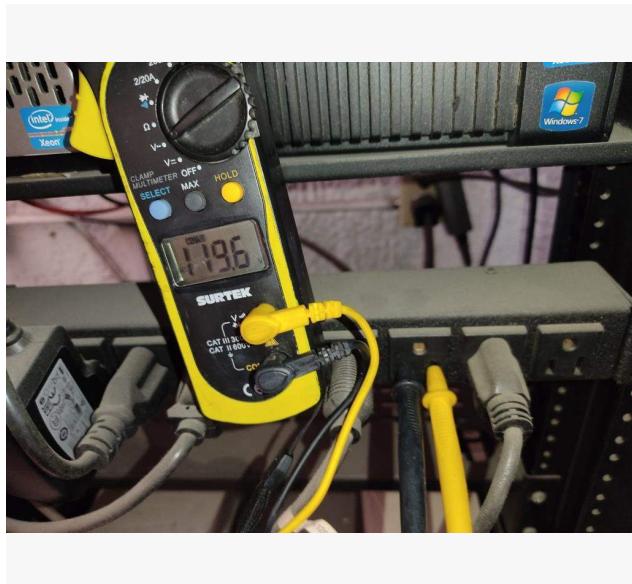


# Mantenimiento



# Mantenimiento

## Mediciones de voltaje





# Mantenimiento

## Pantallas

**Device Status**

**Basic Settings**

**Maintenance** (Active)

**Spectrum Analyzer**

**DES**

**Command Line**

Please setup system Login and Password!

CPU 3% | Memory 48424K / 124597K | Flash 4431K / 15687K

Uptime: 154 days 01:06:20 | H11S01-MINTv1.90.42

**Interface Statistics**

Interface	MAC Address	Status	Mode	Packets Rx/Tx	Errors Rx/Tx	Load (Kbps) Rx/Tx
eth0	00043504ed9e	Up	100 Mbps Full Duplex	417271 / 592472	0 / 0	14/49
eth1	00043514ed9e	Up	--	0 / 0	0 / 0	0 / 0
rf5.0	00043524ed9e	Up	39 Mbps / 5010 MHz / 20 MHz / 23 dBm / GF / DFSOFF	309665 / 170982	1343 / 3	8 / 8
sv1	L2 Management Interface	Up	Switch Group #1	1239 / 1621	0 / 0	14/48

**Links Statistics on rf5.0 (RECAUDADORA LAS AGUILAS ID: 22974)** Links: 1

Status	MAC Address	Name	Node ID	Distance (Km)	Tx Power (dBm)	SNR (dB) Rx/Tx	Level (dB) Rx/Tx	Bitlevel Rx/Tx	Retries (%) Rx/Tx	Load (Kbps) Rx/Tx	Load (bps) Rx/Tx
00:05:19	00043524eda0	AMDA	22976	5	25/23	30 / 31	17 / 31	104 / 39	0 / 0	3 / 4	3 / 3

**Switch Statistics** Status: Started

Refresh Auto Refresh:  Auto Refresh Time (sec): [1]

Show System Log

**Antenna Alignment Tool**

Alignment Test (Interface rf5.0, MAC 00043524eda0, Neighbor AMDA)

**Local**

**Remote**

**Links Statistics on rf5.0**

RSSI, dBm	RSSI, dBm	CINR, dB	CINR, dB	Crosstalk, dB	Crosstalk, dB	EVM, dB	EVM, dB	Retries, %	Retries, %	Tx rate, Kbps	Tx rate, Kbps
-49	-55	41	36	-29	-16	-25	-23	0	0	39000 (MCS10)	104000 (MCS13)

**Switch Statistics** Status: Started

Refresh Auto Refresh:  Start Test Stop Test Clear History Exit Test Help



# Mantenimiento

The screenshot shows the InfiNet Wireless device configuration interface for 'RECAUDADORA LAS AGUILAS'. The main menu includes Device Status, Basic Settings, Maintenance, Spectrum Analyzer, DFS, and Command Line. A red message at the top right says 'Please setup system Login and Password!'. The 'System Settings' section contains fields for Device Name (RECAUDADORA LAS AGUILAS), Start SNTP (unchecked), SNTP Server (unchecked), User Name (root), SNTP IP Address (10.50.2.2), Time Zone (unchecked), Password (unchecked), Latitude (unchecked), Confirm Password (unchecked), Longitude (unchecked), Keep current system password (unchecked), WEB Interface language (English), and Open Map. There is also an 'HTTPS only' checkbox.

The screenshot shows the InfiNet Wireless device configuration interface for 'RECAUDADORA LAS AGUILAS'. The main menu includes Device Status, Basic Settings, Maintenance, Spectrum Analyzer, DFS, and Command Line. A red message at the top right says 'Please setup system Login and Password!'. The 'Network Settings' section displays four network interfaces: eth0 (IP 10.10.10.1, Up checked, Description: [empty], DHCP: unchecked, IPv4 MTU: 1500, Mode: auto), eth1 (IP [empty], Up checked, Description: [empty], DHCP: unchecked, IPv4 MTU: 1500, Mode: auto), rf5.0 (IP [empty], Up checked, Description: [empty], DHCP: unchecked, IPv4 MTU: 1500), and svi1 (IP 10.50.2.2, Up checked, Description: L2 Management Interface, DHCP: unchecked, IPv4 MTU: 1500, Switch group: 1). Below the interfaces are buttons for Create PRF, Create VLAN, Create LAG, Create SVI, Create Tunnel, and Create Tap. The 'Routing Parameters' section shows a Default Gateway (IP 10.10.10.1, Subnet Mask 255.255.255.0) and a Network/Gateway entry (IP 255.255.255.0 / 24). The 'Link Settings' and 'Static Links' sections are also visible.



# Mantenimiento

RECAUDADORA LAS AGUILAS / No seguro | 10.50.2.2

General Settings

- Enable link:
- Type: Master Polling Off
- Mode: Fixed
- DFS: DFS Off
- Tx Power (dBm): 23 Auto:  0
- Node Name: RECAUDADORA LAS AGUILAS
- Scrambling:
- Trap gateway:
- Switch Border:
- Network Entry SNR (dB): Low: 0 High: 2
- RX Attenuation (dB):
- Multicast Mode: Multicast
- Authentication Mode: public
- ODR: Disabled
- OTA: Passive
- Log Level: normal

Add Profile

Current Settings

- Channel Width (MHz): 20
- Frequency (MHz): 5010
- Tx Bitrate (Kbps): 39000 Auto:  0
- Channel Type: Dual Greenfield:
- Network SID: 10101010
- Node ID: 22974
- Security Key:

RECAUDADORA LAS AGUILAS / No seguro | 10.50.2.2

InfiNet wireless

Device Status Basic Settings Maintenance Spectrum Analyzer DFS Command Line Language English logout

Please setup system Login and Password!

Firmware

Firmware Version: H11S01-MINTv1.90.42  
Build Date: Jan 31 2020 16:57:50  
Serial Number: 322974  
Part Number: R5000-Smm/SX\_300.2x300.2x28  
Platform: Processor: MPC8309 400 MHz  
Uptime: 154 days 01:08:32  
Last Reboot Reason: manual delayed restart

Check Latest Release Check Latest Beta

Upload

License:  [No se eligió archivo]   
Firmware:  [No se eligió archivo]   
Configuration:  [No se eligió archivo]   
SSL Certificate:  [No se eligió archivo]

OTA:  Neighbors only:

Download

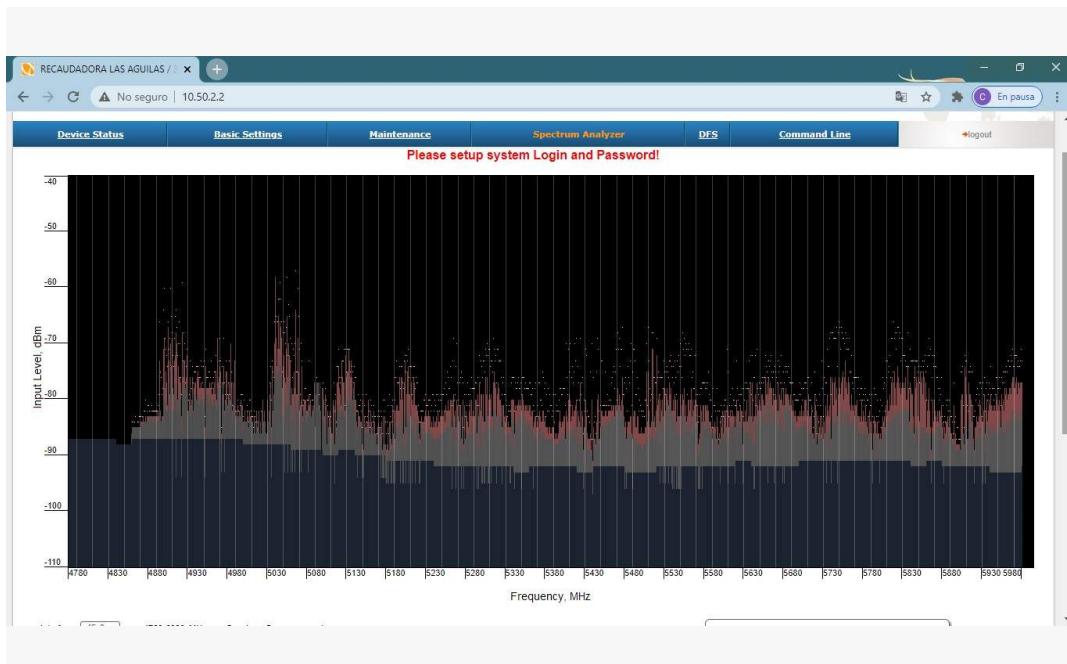
Download License  
Download Firmware  
Download Configuration

Upload

Reboot Restore Factory Settings Delete SSL Certificates View Current License View Current Configuration Create Diagnostic Card

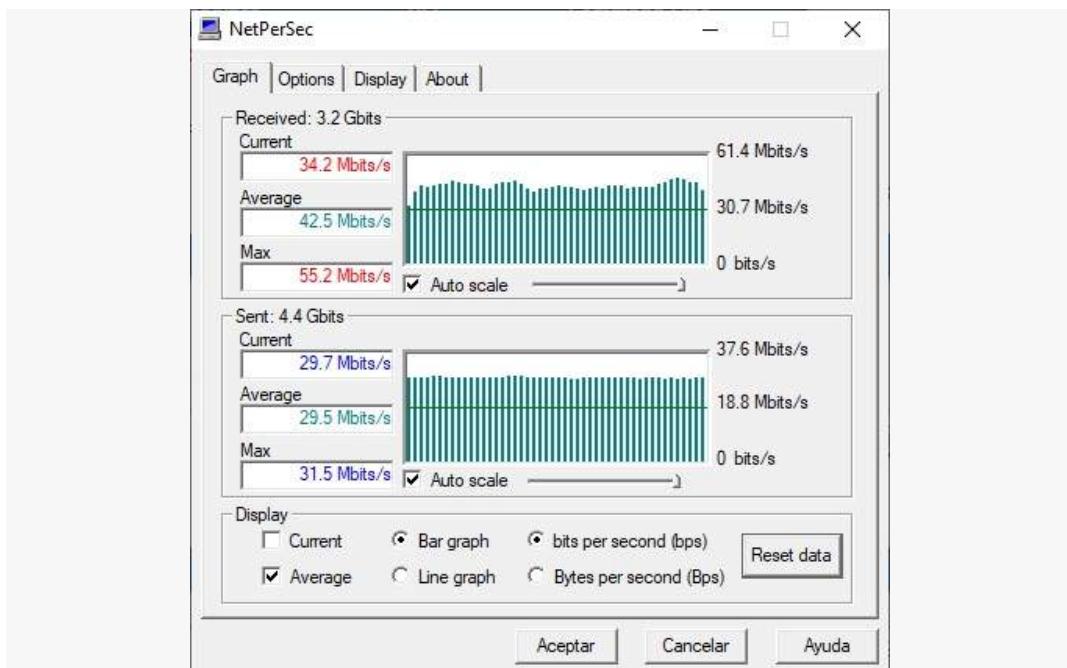


# Mantenimiento

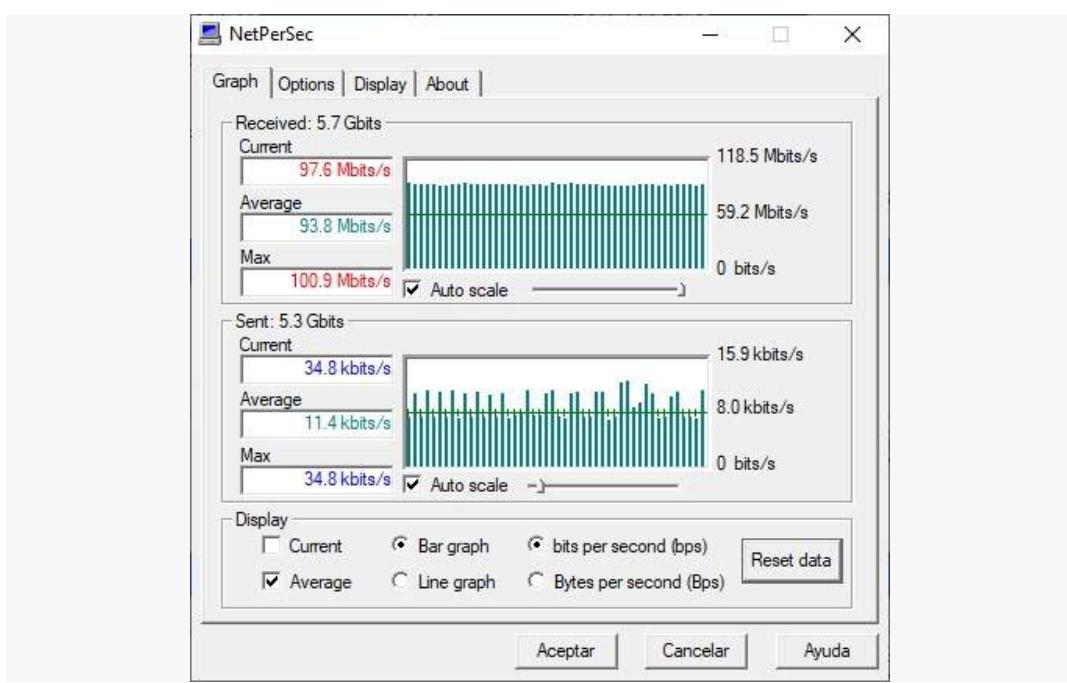


# Mantenimiento

## Pruebas



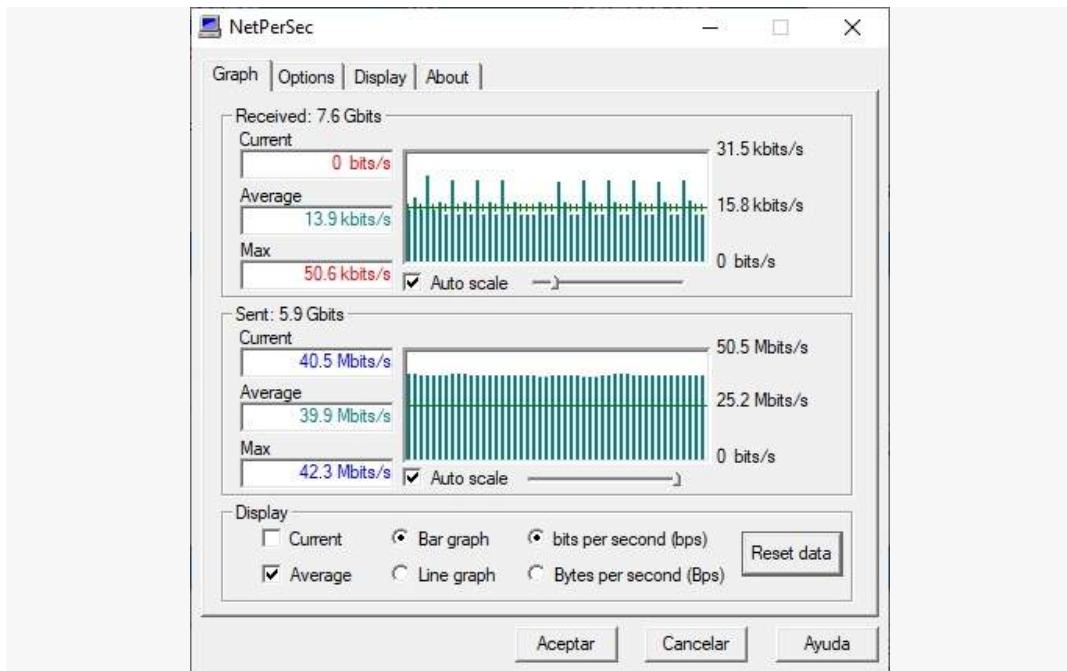
FULL



RX



# Mantenimiento



TX



# Mantenimiento

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## Anexos

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01.\_R5000-smn-21-dbi.pdf





02.-\_MIT-07T-2024.pdf





03.-\_RW-9924-0006.pdf





01.-CARATULA\_DE\_POLIZA-.pdf





## 01.-CARATULA\_DE\_POLIZA.PDF





02.-CARTA\_BIENVENIDA-.pdf





## 02.-CARTA\_BIENVENIDA.PDF





03.-ALCANCES-.pdf





## 03.-ALCANCES.PDF





04.-PROCEDIMIENTO\_DE\_ATENCION-.pdf





## 04.-PROCEDIMIENTO\_DE\_ATENCION.PDF

