

# intelbras

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User guide

**GF 1200**



## **GF 1200**

### **Wi-Fi router 5 (dual band AC 1200)**

Congratulations, you have just purchased a product with Intelbras quality and security.

The GF 1200 router is designed for ISPs that want to deliver much higher performance Wi-Fi to their subscribers. With it you can share Internet access with multiple devices in a high-speed wireless network. Its installation and management can be done through the web interface, quickly and easily. In addition, it is compatible with the Remotize platform (<https://remotize.intelbras.com.br>), which allows providers to manage their router park with convenience and security in a centralized way.

## Care and safety

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Adjust the position of the antennas. Usually, the vertical position is the most indicated.

Prefer to install your router in the central part of the environment and preferably in a higher location, for example on top of a furniture.

Avoid an excessive number of physical barriers between the transmitting and receiving devices on the Wi-Fi network.



Do not leave your router exposed to sunlight or heat sources.



Do not place the router in closed or tight places.



Do not leave your router near the microwave or other equipment that might generate interference.



Do not leave your router near other radio frequency transmitters, for example, wireless (analog) phones.



Use only products that are approved according to current legislation. This will prevent, for example, such products from causing serious interference problems in your network.

# Summary

1. Technical specifications	5
2. Accessories	6
3. Installation	7
4. Configuration	7
4.1. Configuration via web interface	7
4.2. Dashboard	8
4.3. Network settings	9
4.4. System settings	15
5. Frequently Asked Questions	18
Warranty term	19

# 1. Technical specifications

## Hardware

4 fixed antennas of 5 dBi

3 LAN Fast Ethernet ports (10/100 Mbps each)

1 WAN Gigabit Ethernet port (10/100/1000 Mbps)

Chipset Realtek® RTL8197F + RTL8211F + RTL8812BRH

Flash Memory 8 MB

RAM memory 64 MB

OS Linux + Bifrost Intelbras

Button *Reset/WPS* (**Attention:** this button does not have the function *WPS* enabled)

Compatible with the Remotize platform (<https://remotize.intelbras.com.br>)

## Wireless parameters

IEEE standards 802.11a/b/g/n/ac

Radio mode Mu-MiMo, Beamforming

Mode of operation Router

Frequency of operation 2.4 GHz  
5 GHz

Bandwidth 2.4 GHz: 20, 40 MHz with coexistence enabled by default  
5 GHz: 20, 40, 80 MHz with coexistence enabled by default

Transmission rate 2.4 GHz: up to 300 Mbps  
5 GHz: up to 867 Mbps

Channels of operation 2.4 GHz: 1-13 (Brazil)  
5 GHz: 36, 40, 44, 48, 149, 153, 157, 161 (considering 20 MHz. When changing the bandwidth, the system automatically adjusts the available channels on the product interface)

Maximum power (E.I.R.P.) 2.4 GHz: 316 mW (25 dBm)  
5 GHz: 158 mW (22 dBm)

Receiver sensitivity at 2.4 GHz 90dbm@802.11b  
75dbm@802.11g  
73dbm@802.11n 20MHz MCS7  
72dbm@802.11n 40MHz MCS7

Receiver sensitivity at 5 GHz 74dbm@802.11a  
73dbm@802.11n 20MHz MCS7  
72dbm@802.11n 40MHz MCS7  
63dbm@802.11ac 20MHz MCS8  
62dbm@802.11ac 40MHz MCS9  
61dbm@802.11ac 80MHz MCS9

Security WPA-WPA2/PSK with AES encryption

Description of LEDs	
Power	<b>On:</b> power-connected router
	<b>Off:</b> power-disconnected router
Internet	<b>On:</b> router with internet access
	<b>Flashing:</b> Internet port connected, but no Internet access
	<b>Off:</b> no network cable connected to the Internet port
LAN	<b>On:</b> there is(are) device(s) are connected on LAN ports
	<b>Flashing:</b> there is(are) device(s) traveling data on LAN ports
	<b>Off:</b> no device connected to the LAN ports
Wi-Fi	<b>On:</b> Wi-Fi on, no devices trafficking data
	<b>Flashing:</b> Wi-Fi on and devices are trafficking data
	<b>Off:</b> Wi-Fi off (5 GHz and 2.4 GHz)
Power supply	
Input	100V-240 V to 50/60 Hz
Output	12 Vdc / 1 A
Maximum power consumption	5.68 W

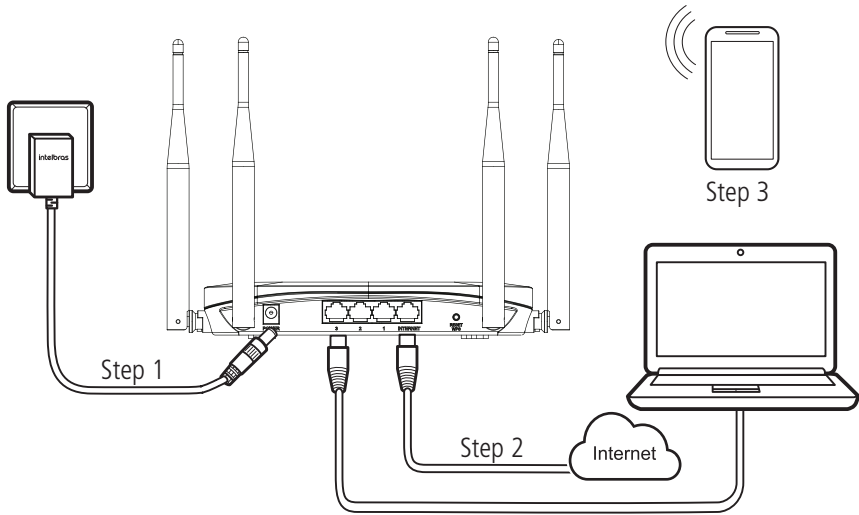
**Attention:** this equipment is not entitled to be protected against harmful interference and may not cause interference to duly authorized systems.

## 2. Accessories

- » Network cable;
- » Power supply;
- » Installation guide.

## 3. Installation

The following scenario describes the product installation for use in *Router* mode.



*Installation in Router mode*

1. Connect the power supply to the router and then plug it into the electrical outlet. The LEDs will light up.
2. Connect the Internet network cable (for example, from your modem or other device) to the router's Internet port;
3. Connect the computer to one of the LAN ports on the router using a network cable;

**Note:** if you wish to access your router via Wi-Fi, access the wireless network named INTELBRAS or INTELBRAS\_5G. If you wish to perform this configuration using a smartphone, disable the mobile data network before proceeding with the router settings.

## 4. Configuration

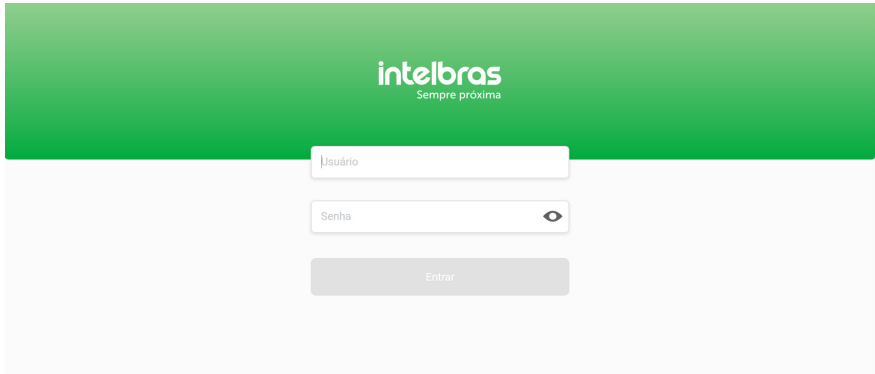
### 4.1. Configuration via web interface

On your computer, open your web browser (we recommend using the most current versions of Google Chrome®, Mozilla Firefox® or Microsoft Edge®) and go to <http://10.0.0.1> or <http://meuintelbras.local/> as shown in the following image. This procedure should be performed whenever you need to change any configuration of your router.



*Accessing the router configuration page*

Your router's login page will open. As factory default, the user is *admin* and the password is *admin*. Enter these credentials in the corresponding fields and click on *Enter*.



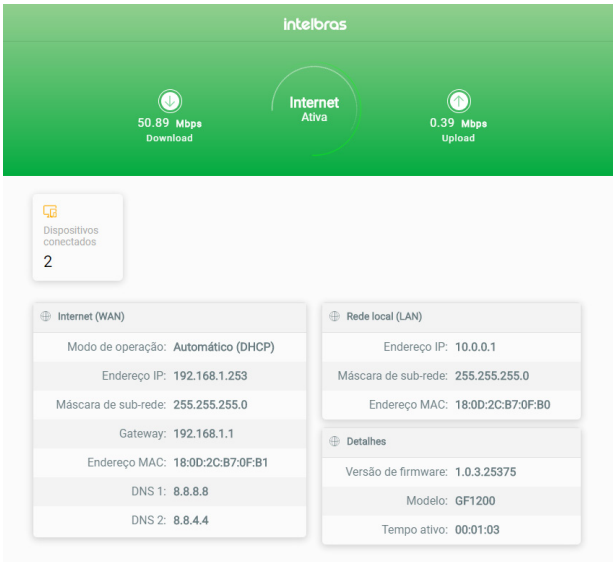
Login page

**Note:** if access is not possible with these credentials:

1. If your router is managed by your ISP or internet operator, please contact the service provider support.
2. If your router is managed by yourself, please refer to the item 5. *Dúvidas frequentes* or contact our support.

### 4.2. Dashboard

After logging in, you will see the *dashboard* screen (following figure), which contains the main router information: Internet connection status, current band consumption, WAN settings, LAN settings, firmware version details, and number of connected devices.



Dashboard

In the animation of the Internet circle, you can see the status of the Internet connection: if the connection is working, you will see *Internet Active* written; if there is any failure, you will see *Internet Inactive* written with a red sign.



**Internet (WAN)**

On the card titled *Internet (WAN)*, you can view the following Internet settings obtained: mode of operation, IP address, subnet mask, gateway, WAN MAC address, DNS1, DNS2 and DNS3.

**Local Area Network (LAN)**

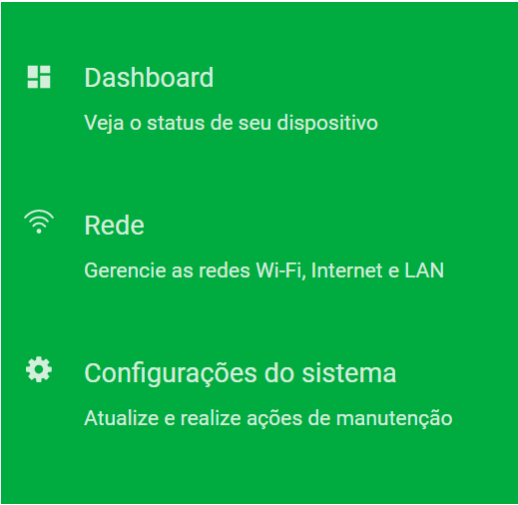
On the card titled *Local Area Network (LAN)*, you can view the following LAN settings obtained: IP address, subnet mask, and LAN MAC address.

**Details**

On the card titled *Details*, you can view the following details: current firmware version of the router, product model, and active time (without restarting) the router.

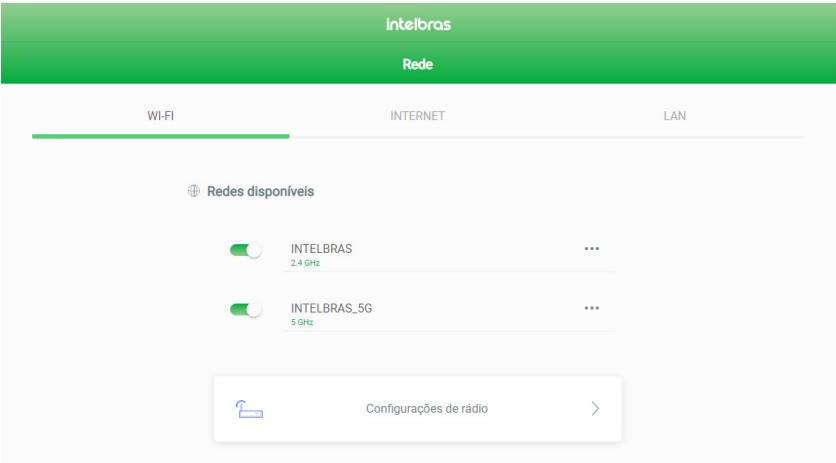
**4.3. Network settings**

In the main menu, available through the icon  in the top left corner, you will have access to all the functions of your product. Click the on menu and select the option *Network*.




Main menu

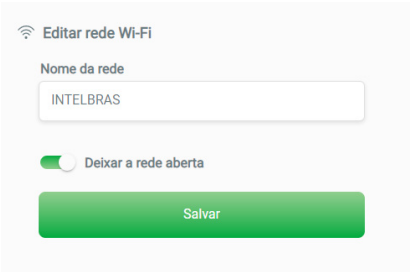
You will be directed to the network settings screen that contains 3 tabs: *WI-FI*, *INTERNET* and *LAN*, as shown in the following image. By default, the *WI-FI* tab will be shown first.



Wi-Fi settings editing screen

**Wi-Fi network name and password**

By default, the 2.4 GHz and 5 GHz networks will be named *INTELBRAS* and *INTELBRAS\_5G*, respectively. You can change the name and password of each separately by clicking on the icon  and then on *Edit* to access the edit screen, as shown in the following image.



Network name and password editing

- » **Network password:** password you want for your Wi-Fi network. For example, *MyHome*. This field allows you to create a name with up to 32 characters.
- Note:** we recommend that you configure different names for the 2.4 GHz and 5 GHz networks, e.g., *MyHome* and *MyHome5G*. This will prevent possible network identification problems for Wi-Fi devices.
- » **Leave network open:** if this option is active (figure above), your Wi-Fi network will be unprotected (no password) and any device within range can connect to the network.

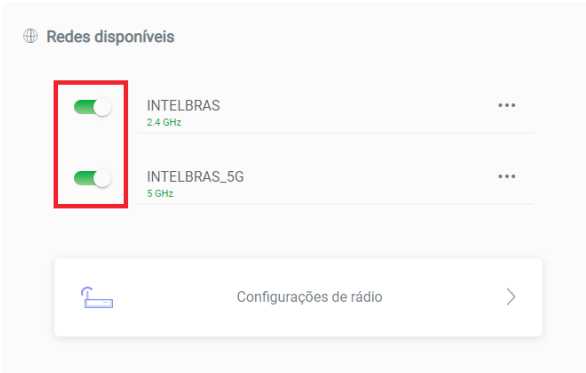
» **Network password:** if you disable the previous option (Leave network open), you can set the password you want for your Wi-Fi network. This is the password you will use when connecting your wireless devices to the network (smart-phones, notebooks, tablets etc). The encryption used will be *WPA/WPA2-PSK*.

**Note:** the fields Wi-Fi Network Name and Wi-Fi Network Password allow the following characters:

Space	!	"	#	\$	%	&	'	(	)	*	+	,	-	.	/	0	1	2	3	4	5	6	7	8	9
:	;	<	=	>	?	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
T	U	V	W	X	Y	Z	[	\	]	^	_	`	a	b	c	d	e	f	g	h	i	j	k	l	m
n	o	p	q	r	s	t	u	v	w	x	y	z	{		}	~									

### Deactivate

If you want any of your Wi-Fi networks to be deactivated, you can do so by using the signaled icons in the image below. Thus, in a common search for Wi-Fi networks on a wireless device, the disabled network will not be listed, nor will it be possible to connect to it.



*Deactivation function for your network*

## Radio

You can change the radio settings of each frequency separately by clicking on *Radio settings* and accessing the edit screen as shown below.

The screenshot displays the 'Rádio' settings interface. It features two sections: '2.4 GHz' and '5 GHz'. Each section includes a 'Habilitado' (Enabled) toggle switch, a 'Largura de banda' (Bandwidth) dropdown menu, and a 'Canal' (Channel) dropdown menu. The '2.4 GHz' section shows the bandwidth set to '20/40MHz' and the channel set to 'Automático'. The '5 GHz' section shows the bandwidth set to '20/40/80MHz' and the channel set to 'Automático'. Both sections have a green 'Salvar' (Save) button at the bottom.

**Rádio**

**2.4 GHz**

Habilitado ☒

Largura de banda  
20/40MHz

Canal  
Automático

Salvar

**5 GHz**

Habilitado ☒

Largura de banda  
20/40/80MHz

Canal  
Automático

Salvar

2.4 GHz and 5 GHz radio settings

- » **Enabled:** if activated (figure above), the radio of a certain frequency will be on and can provide Wi-Fi connection. If it is deactivated, the radio of a certain frequency will be turned off and will not be able to provide Wi-Fi connection.
- » **Bandwidth:** in this field, you can select the bandwidth options you wish for each of the radios.
- » **For Wi-Fi 2.4 GHz network**
  - » **20/40 MHz:** In this option, the router will make available both the 20 MHz option and the 40 MHz option for wireless devices to connect.  
In environments with a lot of interference, your router will automatically use 20 MHz bandwidth.

- » **20 MHz:** In this option, all wireless devices will be forced to connect to the router using the 20 MHz band.
- » **For Wi-Fi 5 GHz network**
  - » **20/40/80 MHz:** in this option, the router will make available the 20 MHz option, the 40 MHz option and the 80 MHz option for wireless devices to connect.
  - » **20/40 MHz:** in this option, the router will set the best bandwidth to be used (between 20 and 40 MHz, discarding option 80 MHz) and will automatically set its operation in this mode.
  - » **20 MHz:** in this option, all wireless devices will be forced to connect to the router using the 20 MHz band.
- » **Channel:** in this field, you can select the channel options you wish for each of the radios. If you use the *Automatic* option, the router will automatically choose the channel. This choice will be based on a scan to check which channel has the least noise or amount of transmissions.

The scan is performed every time the router is restarted or when some radio setting is saved.

## Internet

You can change the Internet settings via the *Internet* tab, available within the *Network* menu.

*DHCP mode Internet settings edit screen*

- » **Operation mode:** you can select three connection modes, described below:
  - » **Automatic (DHCP):** use this mode if your connection settings are provided automatically via a DHCP server (image above).

- » **PPPoE:** use this mode if your Internet access requires authentication via PPPoE. If selected, you will need at least one user and password (provided by your operator or internet provider) to authenticate with the Internet. It may be necessary to fill in the other fields.

intelbras  
Rede

Wi-Fi    INTERNET    LAN

Modo de operação  
PPPoE

Usuário  
Este campo é obrigatório

Senha  
Este campo é obrigatório

Servidor

Nome de serviço

MTU  
1492

Salvar

*PPPoE mode Internet settings edit screen*

- » **Static:** use this mode if your Internet access is provided via a static IP address. All information for configuring this mode must be provided by your operator or internet provider.

intelbras  
Rede

Wi-Fi    INTERNET    LAN

Modo de operação  
Estático

Endereço IP  
192.168.1.11

Máscara de sub-rede  
255.255.255.0

Gateway  
192.168.1.1

MTU  
1500

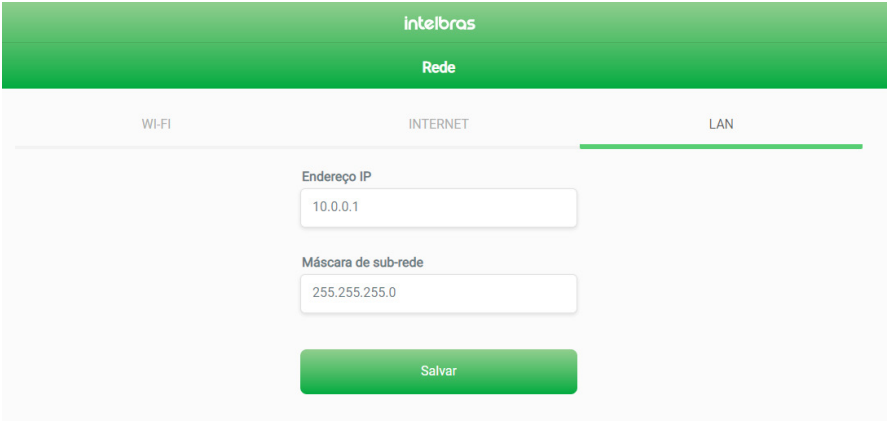
DNS 1  
8.8.8.8

DNS 2  
R R 4.4

*Static mode Internet settings edit screen*

LAN

You can change the local area network (LAN) settings via the LAN tab, available from the Network menu (figure below).



LAN settings editing screen

- » **IP Address:** is the IP address to access the router’s web interface (10.0.0.1 by default). When changing this information, you should use the new address you have chosen to access the router interface or perform access using the address <http://meuintelbras.local>.
- » **Subnet mask:** LAN subnet mask of the router.

**Note:** The DHCP server of the LAN is enabled by default with IP range set by the configured subnet mask.

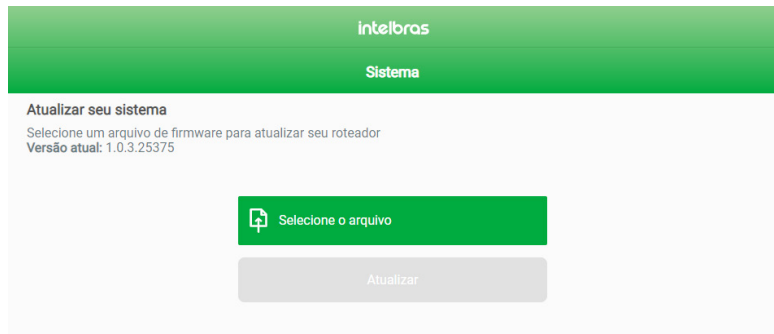
4.4. System settings

You have access to the system settings functions available within the System Settings menu, as shown below.



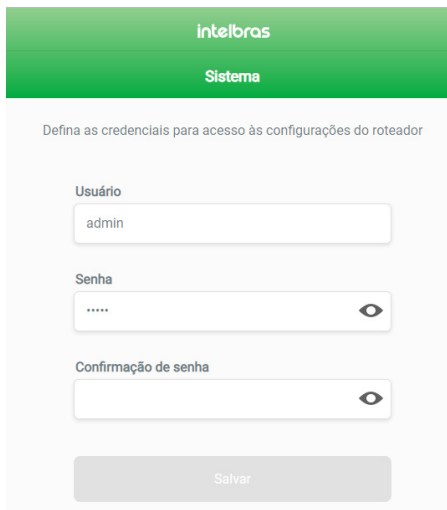
System settings edit screen

- » **Update:** in this tab, in addition to viewing the current firmware version of the product, you can update your router manually by selecting a firmware file using the *Select File* button and then clicking *Update*. The figure below shows this tab with details.



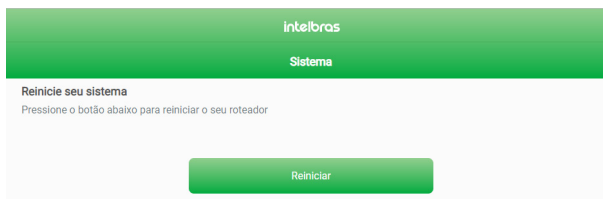
*Update Screen*

- » **User and Password:** in this tab, you can change your router's web interface access credentials through the *User* and *Password* fields. Enter the credentials you want in the corresponding fields, fill in the *Password Confirmation* field with the same password chosen and click on *Save*.



*User Screen and Password*

- » **Restart:** in this tab, you can restart your router by clicking the *Restart* button, as below. If you do not want to access the web interface, you have two other alternatives:
1. You can remove the power cable from the back of your router and then replug it.
  2. You can remove the power supply from the outlet and replug it.



*Restart Screen*



» **Restore:** in this tab, you can perform two actions (as shown below):

1. Change the time the *Reset* button should be pressed to restore your router settings to factory default. To do this, change the value of the pressed *Time* field (seconds) to the desired one and click on the *Save* button.
2. Reset your router settings to factory defaults by clicking the *Restore to Factory Default* button.

**Note:** as described in action 1, you can also restore your router settings to factory default by holding down the RESET WPS button (which is on the back of your router) for the time that was set (the default is 20 seconds).

The screenshot shows the 'Botão reset' section of the Intelbras Sistema configuration page. At the top, there is a green header with 'intelbras' and 'Sistema'. Below the header, the section title 'Botão reset' is followed by the instruction 'Altere o tempo que botão Reset deve ser pressionado para restaurar as configurações de fábrica'. There is a text input field labeled 'Tempo pressionado (segundos)' with the value '20'. Below the input field is a green 'Salvar' button. Further down, the section title 'Restauração do sistema' is followed by the instruction 'Restaurar as configurações do seu roteador ao padrão de fábrica'. Below this is a green button labeled 'Restaurar padrão de fábrica'.

Restore Screen

» **Remote Management:** in this tab, you can change the remote management settings of your router. Two functions are available:

- » **WAN access:** by enabling this function, you can access your router's web interface via an external connection that enters through your Internet port. If you enable this function, you must specify a port for connection through the *Connection Port* field (image below).

The screenshot shows the 'Gerenciamento Remoto' section of the Intelbras Sistema configuration page. At the top, there is a green header with 'intelbras' and 'Sistema'. Below the header, the section title 'Gerenciamento Remoto' is followed by the instruction 'Altere as configurações de acesso ao roteador através da interface WAN'. There are two toggle switches: 'Acesso via WAN' which is currently turned on, and 'Habilitar ping na WAN' which is currently turned off. Below the 'Acesso via WAN' toggle is a text input field labeled 'Porta de conexão' with the value '8080'. At the bottom of the section is a green 'Salvar' button.

WAN access configuration screen

- » **Enable WAN ping:** by enabling this function (image below), you can ping your router's WAN and get a response. If you disable the function, the WAN ping will not get a response.



WAN ping configuration screen

## 5. Frequently Asked Questions

Problem	Solution
What to do when I can't access the Internet?	<p><b>You can try the following options:</b></p> <p><b>Option 1:</b> make sure all the cables are connected correctly, according to the item 3. <i>Installation</i> and that all the equipment in the network is active.</p> <p><b>Option 2:</b> turn the router and the other equipment that provide your Internet connection off and on again.</p> <p><b>Option 3:</b> make sure there is no problem with your broadband service (ADSL/cable).</p>
What to do when I cannot access the configuration web page?	<p>Check all physical connections as per item 3. <i>Installation</i>.</p> <p>The device you will use to perform the configuration (computer, laptop or other) must be connected to the router via cable (LAN) or via Wi-Fi.</p> <p>Check that your device (computer, laptop or other) is configured to obtain an IP address automatically in your network settings. If you are trying to access through a smartphone, disable the mobile data and try again.</p> <p>Clear your browser cache before attempting to access the web page to make the settings.</p>
What can I do if I forget the wireless password?	<p><b>Option 1:</b> connect a device via the network cable to one of the LAN ports on the router. Then, using a web browser, access the product's configuration interface, go to <i>Network &gt; Wi-Fi</i> menu and set your password again.</p> <p><b>Option 2:</b> restore the router to factory settings by pressing the <i>RESET/WPS</i> button for 20 seconds. Then, reconfigure the router as explained in this manual in the item 4. <i>settings</i>.</p>
What can I do if I forget the password to access the web interface?	<p>Restore the router to factory default settings by pressing the <i>RESET/WPS</i> button for 20 seconds. After this time, the product will restart.</p> <p>Then, reconfigure the router as explained in this manual in the item 4. <i>settings</i>.</p> <p><b>Note:</b> if your product settings are managed by your internet provider, please consult them before doing this.</p>
What to do when the 5 GHz network does not appear on my device?	<p>Check the technical specifications of your device to see if it supports 5 GHz Wi-Fi networks, since not all devices support this frequency.</p> <p>If you have configured 2.4 GHz and 5GHz networks with the same name, e.g., <i>MY HOME</i>, when you go looking for the network on your devices to connect, you will only see the Wi-Fi network with the name <i>MY HOME</i>, so there is no differentiation between frequencies.</p>
What to do when I cannot get a good Wi-Fi connection?	<p>For a good connection to the router, your device must be within the signal range of the router, i.e., receiving Wi-Fi signal properly, and with little interference from other Wi-Fi routers or devices at the same operating frequency (2.4 or 5 GHz).</p> <p>To improve your connection you can try:</p> <ul style="list-style-type: none"> <li>» Refer to the item <i>Care and safety</i> to check the best place to install your router.</li> <li>» Manually change the router's operating channel, or restart the product if it has automatic channel setting, so it will choose a new operating channel, with less interference.</li> <li>» Some devices do not support higher speeds. Check the technical specifications of your device to see if it supports the same technologies as your router.</li> </ul>
The Wi-Fi network of my device (mobile, computer or other) sometimes disconnects and reconnects to the router network. What to do?	<p><b>Option 1:</b> are you using different names for the 2.4 GHz and 5 GHz networks and have you saved both on your device, letting it automatically choose between them? If so, remove one of the networks on your device (for example, forgetting the network on the smartphone). Make sure the behavior stops happening. Some devices may be switching between saved networks, so you'll notice disconnections. We recommend keeping saved only one of the networks on the device that has this problem.</p> <p><b>Option 2:</b> did you give equal names to the Wi-Fi 2.4 GHz and 5 GHz networks? If so, change the names to make them different. For example, if your 2.4 GHz network has been set up with the name <i>My Network</i>, change the name of the 5GHz network to <i>My 5G network</i>.</p> <p>If no option solves your problem, please contact our support.</p>
How do I restore my router to the factory default settings?	<p>With the product on and in normal operation, press the <i>RESET/WPS</i> button for about 20 seconds. When the reset time is reached, with the exception of LED Power, the other LEDs on the product will turn off. When this occurs, you can stop pressing the button. After releasing the button, wait a few seconds while the configuration is restored. You can also restore through the web interface, as per item <i>Restore</i> within 4.4. <i>System settings</i>.</p> <p><b>Note:</b> if your product settings are managed by your internet provider, please consult them before doing this.</p>

# Warranty term

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It is expressly stated that this contractual warranty is given subject to the following conditions:

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Name of customer:

Signature of the customer:

No. of the invoice:

Date of purchase:

Model:

Serial No:

Reseller:

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1. All parts and components of the product are under warranty against possible manufacturing defects, which may present, for a period of 5 (five) years – comprising 90 (three) months of legal warranty and 57 (fifty seven)

months of contractual warranty –, counted from the date of purchase of the product by the Consumer, as stated in the invoice of purchase of the product, which is part of this Term throughout the national territory. This contractual warranty includes the express exchange of products that are defective in manufacture. If there is no manufacturing defect, but flaw(s) from improper use, the Consumer will bear these expenses.

2. The product installation must be done in accordance with the Product Manual and/or Installation Guide. If your product needs to be installed and configured by a qualified technician, look for a suitable and specialized professional, and the costs of these services are not included in the value of the product.
3. If you notice a defect, you should immediately contact the nearest Authorized Service listed by the manufacturer – only they are authorized to examine and remedy the defect during the warranty period provided herein. If this is not adhered to, this warranty will lose its validity, as it will be characterized as the violation of the product.
4. In the event that the Customer requests home care, the Customer should refer to the nearest Authorized Service for the technical visit fee. If the need for withdrawal of the product is found, the expenses arising, such as transportation and safety to and from the product, are under the responsibility of the Consumer.
5. The warranty will totally lose its validity in the event of any of the following: a) if the defect is not of manufacture, but caused by the Consumer or by third parties alien to the manufacturer; b) if the damage to the product comes from accidents, claims, agents of nature (lightning, floods, landslides, etc..), humidity, mains voltage (overvoltage caused by accidents or excessive mains fluctuations), installation/use in disagreement with the user manual or due to natural wear of parts, pieces and components; c) if the product has been influenced by chemical, electromagnetic, electrical or animal (insects, etc.); d) if the product's serial number has been tampered with or erased; e) if the device has been violated.
6. This warranty does not cover loss of data, so it is recommended, if the product is concerned, that the Consumer make a regular backup copy of the data contained in the product.
7. Intelbras is not responsible for the installation of this product and also for any attempts of fraud and/or sabotage on its products. Keep software and application updates, if any, up to date, as well as network protections necessary to protect against hackers. The equipment is under warranty against flaws within its normal conditions of use, and it is important to be aware that, since it is an electronic equipment, it is not free from frauds and scams that may interfere with its correct functioning.
8. After its useful life, the product must be delivered to an Intelbras authorized technical assistance or directly to its final destination in an environmentally adequate way, avoiding environmental and health impacts. If you prefer, the battery as well as other Intelbras brand electronics without use, can be disposed of at any Green Eletron collection point (electro-electronic waste manager with which we are associated). If you have any questions about the reverse logistics process, please contact us at (48) 2106-0006 or 0800 704 2767 (Monday to Friday from 8 am to 8 pm and Saturdays from 8 am to 6 pm) or via e-mail [suporte@intelbras.com.br](mailto:suporte@intelbras.com.br).

As these are the conditions of this Term of Additional Guarantee, Intelbras S/A reserves the right to change the general, technical and aesthetic characteristics of its products without prior notice.

The manufacturing process of this product is not covered by ISO 14001 requirements.

All images in this manual are illustrative.

# intelbras

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*talk to us*

**Customer Support:** (48) 2106 0006

**Forum:** [forum.intelbras.com.br](http://forum.intelbras.com.br)

**Support via chat:** [intelbras.com.br/suporte-tecnico](http://intelbras.com.br/suporte-tecnico)

**Support via e-mail:** [suporte@intelbras.com.br](mailto:suporte@intelbras.com.br)

**Customer Service:** 0800 7042767

**Where to buy? Who installs it?** 0800 7245115

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