ALTICE LABS MANUAL

Smart Wi-Fi User Manual

D2260G

Version 1.3 | 2020-08

Document’s version history

Version	Date	Author	Description
1.3	25-08-2020	Manuel Veríssimo	Initial version

Altice Labs
Rua Eng. José Ferreira Pinto Basto
3810-106 Aveiro – Portugal
http://www.alticelabs.com
Tel: +351 234 403 200
Fax: +351 234 424 723

Contents

List of figures

Glossary

AC	*Alternating Current*
AC	*Access Concentrator*
AES	*Advanced Encryption Standard*
AS	*Autonomous System*
AP	*Access point*
AUTO-MDIX	*Medium Dependent Interface Crossover Automatic Choice*
BBF	*Broadband Forum*
CAT5E	*Category 5 Cable*
CATV	*Cable TV*
CO	*Central Office*
CPE	*Customer-Premises Equipment*
DC	*Direct Current*
DDNS	*Dynamic DNS*
DHCP	*Dynamic Host Configuration Protocol*
DNS	*Domain Name System*
FTP	*File Transfer Protocol*
FTTH	*Fiber-To-The-Home*
FXS	*Foreign eXchange Station*
GEM	*GPON Encapsulation Module*
GPON	*Gigabit-capable Passive Optical Network*
GW	*Gateway*
HG	*Home Gateway*
ID	*Identification*
HSI	*High Speed Internet*
IEEE	*Institute of Electrical and Electronics Engineers*
IMS	*IP Multimedia Subsystem*
IP	*Internet Protocol*
IPTV	*Internet Protocol Television*
IPv4	*Internet Protocol version 4*
IPv6	*Internet Protocol version 6*
ISP	*Internet Service Provider*
ITU-T	*International Telecommunication Union-Telecommunications*
LAN	*Local Area Network*
LED	*Light Emitting Diode*
MAC	*Media Access Control*
MAN	*Metropolitan Area Network*
MTBF	*Mean Time Between Failures*
OLT	*Optical Line Terminal*
ONT	*Optical Network Terminal*
PC	*Personal Computer*
PON	*Passive Optical Network*
PSK	*Phase-Shift Keying*
RF	*Radio Frequency*
RJ11	*Registered Jack model 11*
RJ45	*Registered Jack model 45*
SC/APC	*SC/APC optical connector*
SIP	*Session Initiation Protocol*
SSID	*Service Set Identifier*
STB	*Set Top Box*
T-CONT	*Transmission Container*
TCP	*Transmission Control Protocol*
TKIP	*Temporal Key Integrity Protocol*
TV	*Television*
UDP	*User Datagram Protocol*
URL	*Uniform Resource Locator*
USB	*Universal Serial Bus*
UTP	*Unshielded Twisted Pair*
VoIP	*Voice over Internet Protocol*
WAN	*Wide Area Network*
WEP	*Wired Equivalent Privacy*
Wi-Fi	*Wireless Fidelity*
WLAN	*Wireless Local Area Network*
WPA	*Wi-Fi Protected Access*
WPS	*Wi-FiProtected Setup*

This User Manual is applicable to the equipment Smart Wi-Fi Altice D2260G with the FCC ID: 2ACJF-EXT-D2260G

FCC NOTICE

This device complies with FCC part 15 rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference and

2. This device must accept any interference, including interference that may cause undesired operation of the device

Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to

Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

This device meets the FCC requirements for RF exposure in public or uncontrolled environments.

RF Exposure Statement

Note: This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with a minimum distance of 7.9 inches (20 cm) between the radiator and your body.

This system has been evaluated for RF exposure for humans in reference to ANSI C 95.1 (American National Standards Institute) limits.

The evaluation was based in accordance with FCC OET Bulletin 65C rev 01.01 in compliance with Part 2.1091 and Part 15.27.

The minimum separation distance from the antenna to general bystander is 7.9 inches (20 cm) to maintain compliance.

1 Introduction

The solution that creates a clear and powerful Wi-Fi signal for any and all environments, in interior coverage scenarios.

The solution incorporate the hardware (FGW-FiberGateway and Smart Wi-Fi AP extenders), a mobile APP (Android &iOS) and a Cloud (web-portal) that unifies, configures, manages, and reports the Wi-Fi Mesh Ecosystem, based on Wi-Fi EasyMesh™ from Wi-Fi Alliance®

1.1 What is Mesh

The Smart Mesh Wifi uses multiple access points (APs), which work together, as a connected system by mesh technology, to ensure that all areas of the home have strong, efficient and full Wi-Fi coverage.

The EasyMesh ™ Wi-Fi Networks combines the benefits of easy-use, self-adapting Wi-Fi, and enables smart changes in network conditions to deliver consistent & high-quality user experience.

The Smart Wi-Fi extender AP equipment is part of the Altice Labs Smart Wi-Fi solution.

The Altice Labs Smart Wi-Fi certified solution based on Wi-Fi EasyMesh™ from Wi-Fi Alliance®, provide an adequate answer for the in-house Wi-Fi coverage scenarios.

The solution incorporates hardware (FGWs and Smart Wi-Fi AP extenders), a mobile user APP (Android &iOS) and a unified web portal cloud-based to configure, manage and report the Wi-Fi mesh ecosystem. Both FGWs and Smart Wi-Fi APs will run local software (local Controller, local Agent and a Smart Wi-Fi Management agent) supported on high performance state-of-the-art Wi-Fi interfacing.

Wi-Fi EasyMesh™ networks utilize multiple APs that work together to ensure all areas of the home have complete Wi-Fi coverage and enable changing network conditions to deliver a consistent, high quality user experience. Those networks use centralized controller software that communicates with Agent entities located at each AP. The controller receives metrics, statistics and capability data from all devices in the network and controls the operating parameters of the APs in the network, such as SSID name, security key, channel of operation, data flow topology, and client roaming between APs. Based on the collected information of all APs, it also sends control commands to the Agents to steer/manage the Wi-Fi stations between APs and Wi-Fi bands in order to optimize network performance, through optimized load balancing, airtime reduction and other management functions.

1.2 Features

- Unifies FGW and Extenders into a single network
- Reduces client roaming and association inconsistencies
- Both wireless and wireline (Ethernet) connections may be used to link FGW and Extenders while FGW acts as a WLAN controller to the extenders
- Interoperable mesh solution compliant with Wi-Fi Alliance Multi-AP specification
- Optimal QoS and throughput performance
- High performance HW solution based on ultimate IEEE 802.11 standards;
- Interoperable mesh solution compliant with Wi-Fi ®Alliance EasyMesh™ Multi-AP specification;
- Cloud platform for central monitoring, diagnostics and optimization of the Smart Wi-Fi network;
- Remote control of network devices;
- Provide intelligence to mesh Wi-Fi through analytics;
- Mobile APP control inside/outside home network.

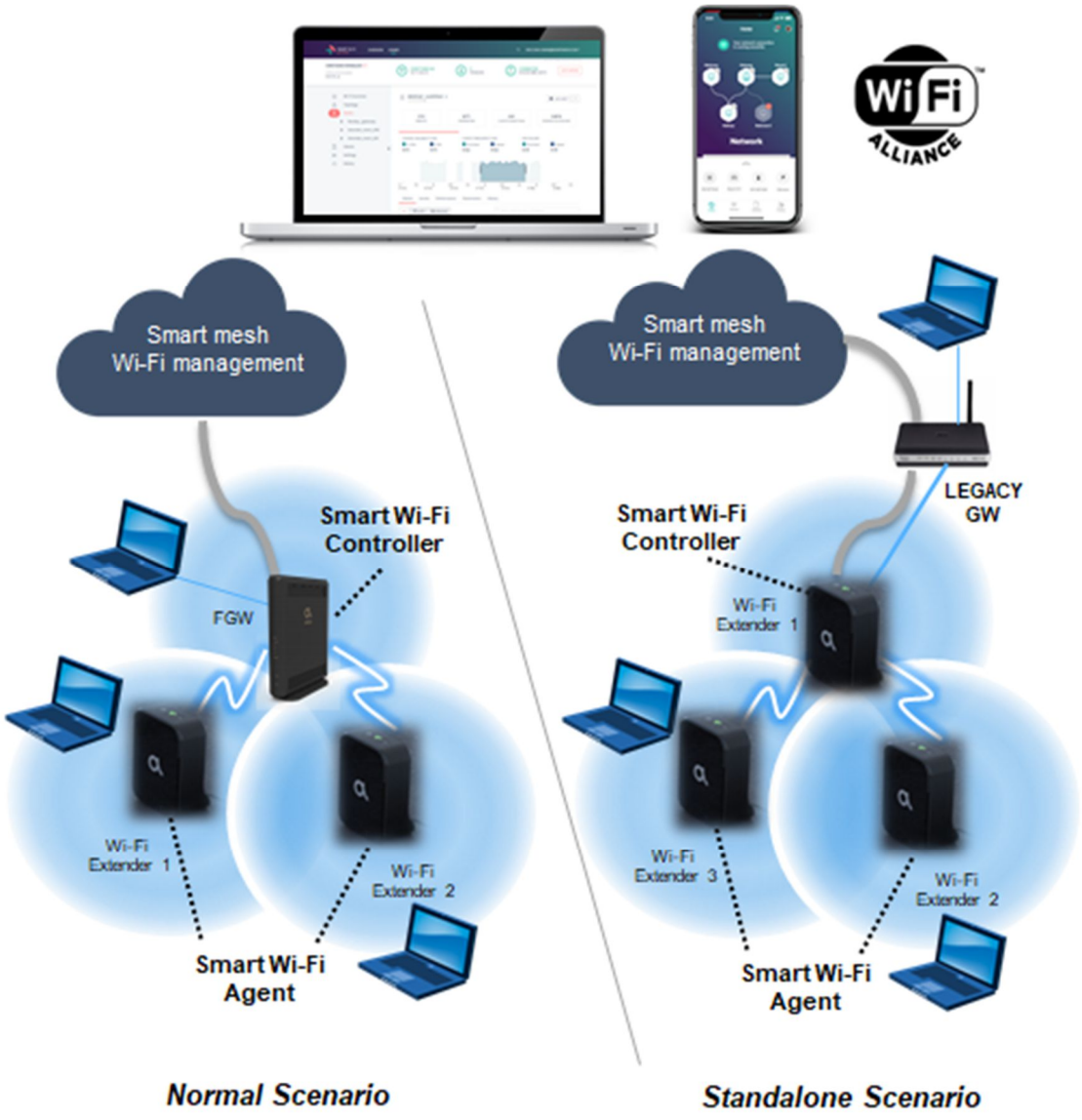

Figure 1 – The Smart Wi-Fi Scenario

2 System objectives

In a whole-home Wi-Fi scenario, there is an Altice Labs Smart Wi-Fi management controller running on the Gateway, providing the control and management of the entire Mesh Wi-Fi ecosystem, allowing to significantly extend the Wi-Fi coverage of the Gateway and improving overall Wi-Fi Quality-of-Experience (QoE).
Those networks use centralized controller software that communicates with Agent entities located at each AP. The controller receives metrics, statistics and capability data from all devices in the network and controls the operating parameters of the APs in the network, such as SSID name, security key, channel of operation, data flow topology, and client roaming between APs.

2.1 Management features

2.1.1 Customer

Mobile APP

Android and IOS APPs to configure and optimize the Wi-Fi service;

User Cloud

Access to the cloud with customer profile to have full visibility of Smart Wi-Fi service performance;

Self-Care

Integration with self-care applications that allows the configuration, troubleshooting, and management of Wi-Fi service;

2.1.2 Operator

Performance & Statistics

Rich dashboarding capabilities to explore Wi-Fi ndicators at several perspectives. Network topology, KPI management, reports, client profile symptom detection for full visibility and alerts;

Diagnostics & Troubleshooting

Perform real-time analysis,tests and manage Wi-Fi configuration settings to applications troubleshoot problems;

Device Management

Firmware upgrade, inventory, troubleshooting, and management of remote actions, device configurations and bulk operations;

3 Smart Extender

Figure 2 – The Extenders hardware

3.1 INTERFACES, LEDS AND BUTTONS

Ethernet	2x GBE 10/100/1000 BASE-T
Wi-Fi	Dual-band 2x2 (2.4GHz) + 4x4 (5GHz)
Physical buttons	Power(On/OFF); Reset (CPU); WPS
LEDs	Power led: 1 x bi-color backlit power button; Wi-Fi status: 1 x tri-color (2.4GHz and 5GHz) status led; WPS led: 1 x bi-color backlit status led

3.1.1 LEDS AND BUTTONS

Nominal Modes

Extender mode	LED (from left to right)	NAME	EVENT	STATE	COLOR
	1	**POWER**	while booting + driver boot	Blinking (**(100 ms ON and 100 ms OFF)**	White
			boot completed	Fix	White
			when downloading a FW	Pulse : ALL LEDs are blinking at the same time! (normally is simultaneous with flashing: 100 ms ON and 100 ms OFF)	White
	2	**Wi-Fi**	Wifi ON - extender not yet on-boarded	Slow blinking (3s OFF and 100ms ON)	RED
			Wifi ON - extender on-boarded with good BH link	Fix	White
			Wifi ON - extender on-boarded with poor BH link	Slow blinking (5s OFF and 100ms ON)	White
			Wifi ON - extender on-boarded with no BH link	Fix	Red
			Wifi pausing OFF	Off	N/A
	3	**WPS**	by default	Off	
			during paring	Blinking **(200 ms ON and 100ms OFF: broadcom default)**	White
			paring successful	Fix during 30 sec, then Off	White
			WPS session overlap	Fast blinking during 2 minutes, then Off	White
	Ethernet ports		No link	Off	N/A
			Link	Fix	Green
			Link & Traffic	Blinking	Green

Controller mode	LED (from left to right)	NAME	EVENT		
	1	**POWER**	while booting + driver boot	Blinking **(100 ms ON and 100 ms OFF)**	White
			boot completed	N/A	

			when downloading a FW	Pulse (100 ms ON and 100 ms OFF)	White
	2	**Wi-Fi**	Wifi ON	Fix	White
			Wifi pausing OFF	Off	N/A
	3	**WPS**	by default	Off	N/A
			during paring	Blinking (100 ms ON and 100 ms OFF)	White
			paring sucessful	Fix during 1 minute, then Off	White
			WPS session overlap	Fast blinking during 1 minute, then Off **(100ms on, 100ms off, 5 times, off for 500ms - broadcom default)**	White
	Ethernet ports		No link	Off	N/A
			Link	Fix	Green
			Link & Traffic	Blinking	Green

Alarm modes

	ALARM	LED	STATE		
	Temperature	WPS	Fix	Red	Red
		Wi-Fi	nominal mode	nominal color	nominal color
		POWER	Fix	Red	Red

Firmware upgrade mode

	STEP	LED	STATE		
	Download	WPS Wi-Fi	Pulse	Pulse	White
		POWER	Pulse	Pulse	White
	flashing	WPS Wi-Fi	Blinking	Blinking	White
		POWER	Blinking	Blinking	White

Buttons management

	Button	Push	Duration	Duration	Action
	WPS	short	<5s	<5s	Activates WPS pairing
		long	≥5s	≥5s	Do nothing
	POWER	short	<5s	<5s	If current state is "Power Off", then change state to "Power On" If current state is

		long	≥5s	≥5s	"Power On", then do nothing If current state is "Power Off", instead of doing nothing --> then change state to "Power On"
	Reset	short	<5s	10s	Do nothing
		long	≥5s	10s	Factory reset
	Reset + WPS	long	≥5s	≥5s	If current role is "extender mode", then change to "controller mode" If current role is "controller mode", then change to "extender mode"
	Extender : Power + WPS	Long	≥5s	N/A	
	Controller: Power + WPS	Long	≥5s	N/A	

3.2 Technical Specifications

Antenna Configuration	*Dual band 2x2 (2.4GHz) + 4x4 (5GHz)*
Transmit power	*Max conducted 2,4 GHz up to +20dBm; Max conducted 5GHz up to +30dBm*
Wi-Fi support	*802.11b/g/n/ax @ 2.4GHz + 802.11a/n/ac/ax @ 5GHz*
Wi-Fi Standards	*IEEE802.11 a/b/g/n/ac/ax; 802.11r Fast Roaming, 802.11e (WMM), 802.11v, 802.11k*
Security / Encryption	*WPA, WPA2, WPS*
Multi-AP Wi-Fi Alliance compliance	*EasyMeshTM, Wi-Fi Alliance® Multi-AP specification.*

Management	**features:** • *Mobile APPs -Android and IOS APPs to* • *Performance & Statistics - Rich dashboarding capabilities* • *configure and optimize the Wi-Fi service; to explore Wi-Fi indicators at several perspectives, network User Cloud - Access to the cloud with topology, KPI management, reports, symptoms detection customer profile to have full visibility of and alerts; mesh Wi-Fi service performance;* • *Diagnostics & Troubleshooting - Perform real-time analysis,* • *Self-Care - Integration with self – care tests and manage Wi-Fi configuration settings to applications troubleshoot problems;* *that allows the configuration,* • *Device Management - Firmware upgrade, inventory, troubleshooting, and management of remote actions, device configurations and bulk Wi-Fi service operations;*

3.2.1 Wi-Fi

Items	Compliance	Description
	IEEE 802.11 b/g/n/ac	-
Bit Rates	802.11 b/g	1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54Mb/s
	802.11 n	Up to 600Mb/s over four spatial streams in the 2.4GHz band; Up to 600Mb/s over four spatial streams in the 5GHz band
	802.11 ac	Up to 1733Mb/s over four spatial streams in the 5GHz band
	802.11 ax	Up to 4800Mb/s over four spatial streams in the 5GHz band
SSID	-	Up to 8
Operation Frequencies	-	2.4GHz (ISM) or 5GHz (U-NII)
Channel Bandwidths	-	20MHz and 40MHz channels in the 2.4GHz band; 20MHz, 40MHz, 80MHz in the 5GHz band
MIMO	-	4x4
MCS	-	Supported values: 0-31 and 32 for 802.11n 0-9 for 802.11ac

Items	Compliance	Description
		Proprietary 10 -11 (1024QAM)
Wireless Security	WEP	40bit secure key and 24 bit as defined in 802.11-2007
	WPA	
	WPA2	
	AES	encryption/de-encryption coupled to TKIP (as defined in 802.11-2007 and 802.1X)
Short Guard Interval	SGI support	-
Space-Time Block Coding	STBC support	-
Transmit Power (e.ir.p.)	-	Up to +34dBm in the 2.4GHz band; Up to +34dBm in the 5GHz band;
Receive Sensitivity	Mode b (8% PER)	1Mb/s: -96dBm 11Mb/s: -88dBm
	Mode g (10% PER)	6Mb/s: -90dBm 12Mb/s: -89dBm 54Mb/s: -75dBm
	Mode n/2.4GHz (10% PER)	1Mb/s: -96dBm 54Mb/s: -75dBm M0/20MHz: -88 dBm M0/40MHz: -85 dBm M7/20MHz: -66 dBm M7/40MHz: -63 dBm
	Mode n/5GHz (10% PER)	6Mb/s: -89 dBm 54Mb/s: -74 dBm M0/20MHz: -87 dBm M0/40MHz: -83 dBm M7/20MHz: -64 dBm M7/40MHz: -61 dBm
	Mode ac/5GHz (10% PER)	M0/20MHz: -87 dBm M0/40MHz: -83 dBm M0/80MHz: -80 dBm M9/20MHz: -58 dBm M9/40MHz: -55 dBm M9/80MHz: -52 dBm

3.2.2 Standards

EMC	Standards	EMC Directive 89/336/EEC, EMC Addendum Directive 92/31/EEC, EMC Addemdum Directive 91/263/EEC (Telecommunications Terminal Equipment Directive)
	Emissions	EN50081-1, EN55022
	Immunity	EN50082-1, EN61000-4-2, EN61000-4-3, EN61000-4-4
Operating Limits	**Temperature**	EN300019

	Relative humidity, maximum	EN300019
Environmental Standards	**Acoustic noise**	ISO 3743 (<45dBa)
Power and Grounding		ETSI EN 300 132-2 V2.1.1 (2003-01)
		ETSI ETS 300 253: January 1995
Energy Consumption		European Code of Conduct on Energy Consumption of Broadband Equipment V3
Safety and Protection		EN/IEC 62368-1
Mechanical Resistance		EN300019
Quality		CE - Conformité Européenne
		RoHS 2002/95/EC Directive Compliance

EMC	Emissions	FCC CFR 47 Part 15 Subpart B Section 15.107 Conducted Emissions – Class B FCC CFR 47 Part 15 Subpart B Section 15.109 Radiated Emissions – Class B
Radio	2.4 GHz	FCC CFR 47 Part 15 Subpart C Section 15.247
	5 GHz	FCC CFR 47 Part 15 Subpart E Section 15.407 (UNII-1 and UNII-3)
Safety		Conforms to UL Standard 62368-1
Certifications		ETL Intertek Listing Certification Intertek 5018284 Conforms to UL Std. 62368-1 Certified to CSA Std. C22.2 No. 62368-1
		FCC Certification

3.3 Get Smart Wi-Fi up and running

3.3.1 Package content

Figure 3 – Smart Wi-Fi, power supply 110V/12V

3.3.2 PUT THE Smart Wi-Fi IN OPERATION

3.3.2.1 Power on

a) Connect the 110V / 12V power supply between the Smart Wi-Fi (1) and the 110V power outlet
b) Press the ON / OFF button (2) to turn on the power

Figure 4 – Smart Wi-Fi power on

3.3.2.2 Shut down

Press the ON / OFF button (2) to turn off the power

3.3.3 PUT THE SMART MESH IN Wi-Fi NETWORK

Press the WPS button (2) to connect to the Wi-Fi network. Press the WPS button on Smart Wi-Fi and FiberGateway.

Figure 5 – Connect Smart Wi-Fi to the FiberGateway

4 User interface

4.1 Mobile application initial screen

The Smart Wi-Fi application can be obtained from the Google store for android environments and the Apple store for Apple environments. After installing the application in the respective environment, the initial screen is shown in the following figure:

Figure 6 – Mobil application initial screen

4.2 Login

This is the authentication screen in APP. The user name (Username) and the access key (Password) must be entered. There is also in this screen the possibility to retrieve the forgotten password (Forgot password), show password, and login (Log in).

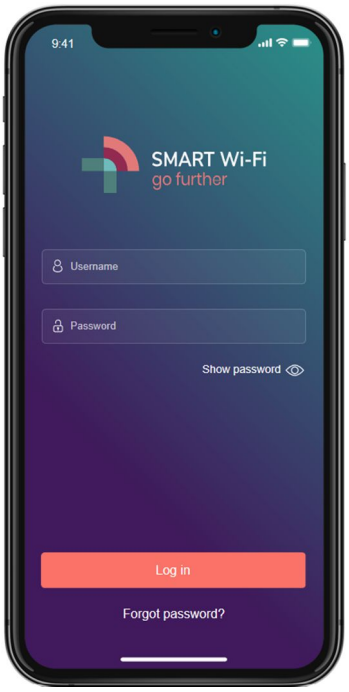

Figure 7 – Mobil application Login

4.3 Initial Setup

This screen contains the information of the initial procedure for placing the APP on the home network. To implement this procedure you must configure the Wi-Fi parameters off the FiberGateway, or read the QR code. After this procedure press the Next bar.

If something does not agree with the procedure, this screen shows "Unable to connect to your network. Please check your internet connection or contact your support (0000000000)".

Figure 8 – Mobil application initial screen

4.3.1 Change name or password

In this screen is implemented the Change Name (Wi-Fi SSID) and password change functionality. It is possible to choose the possibility that the password can be visible on the screen.

If any of the information provided is invalid then the following information is displayed on the screen: "Unable to change name or password. Special characters ar not allowed."

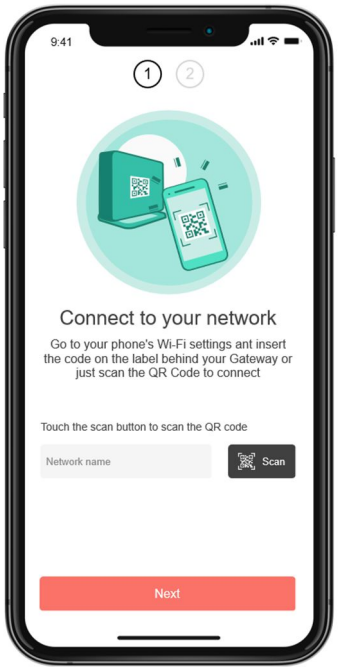

Figure 9 – Change name or password

4.3.2 Ready to Smart Wi-Fi

In this screen we have access to three features: Add Smart Wi-Fi (Add Extender), get more information about Smart Wi-Fi, (Learn more about Smart Wi-Fi) and start using the application (Start using now).

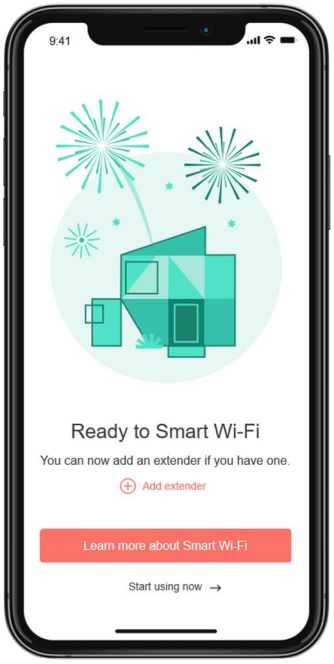

Figure 10 – Ready to Smart Wi-Fi

4.3.3 Add extender

This screen is connected to the domestic Wi-Fi network. The network name is the Wi-Fi SSID. After the connection is made, the next step is to identify a good place to place the smart Wi-Fi extender. To proceed to this step, select "Next". The place to place the Smart extender must have an available electrical power point (230V) Placing the smart extender within the boundary of Wi-Fi coverage implies a lower bandwidth throughput. Improving Wi-Fi coverage also improves bandwidth throughput.

To help in this choice will be used the smartphone, which will show us three situations: With the red color in the symbol appears the information "The signal is bad here Try a better position": With the yellow color in the symbol appears the "Not only good Try a better position ": With the green color in the symbol appears the information "

Ok, this is a good place to put your extender ":

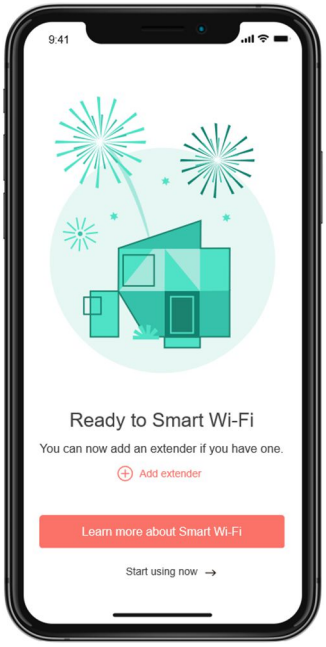

Figure 11 – Add extender

4.3.4 Find a place for extender

Let's use your smartphone to find a good place for your extender Be sure that place has an electrical outlet. Press the bar “Let´s do it”.

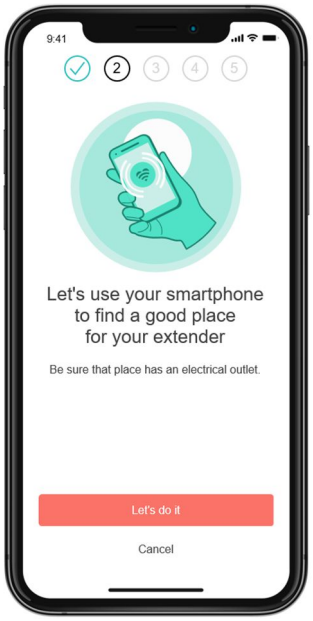

Figure 12 – Find a place for extender

4.3.5 Good place for extender

Position your extender, ideally no more than two rooms away from the Gateway. We can see the symbol in the app changing the color from red (bad place for the extender) to yellow (not a very good place) to green. Ok, this is a good place to put your extender.

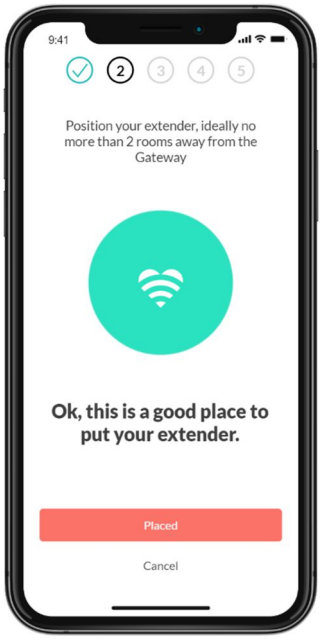

Figure 13 – Good place for extender

4.3.6 Plug your extender

Plug your extender and wait until the led gets green.

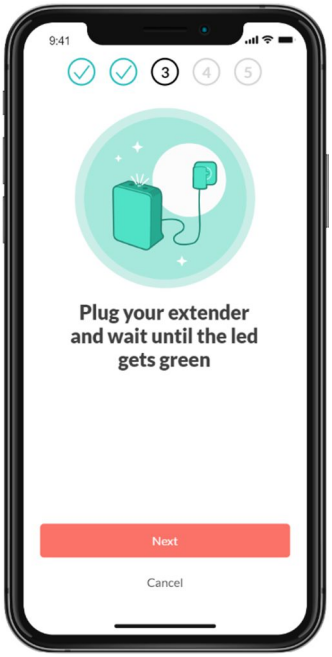

Figure 14 – Plug your extender

4.3.7 Connect the extender

Press the WPS button in your extender and wait until the message connected appear in the App.

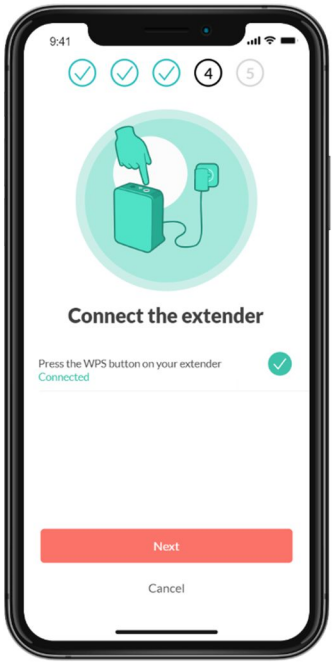

Figure 15 – Connect the extender

4.3.8 Name your extender

After the extender is switched on, some additional configurations are possible, such as giving the extender a different name.

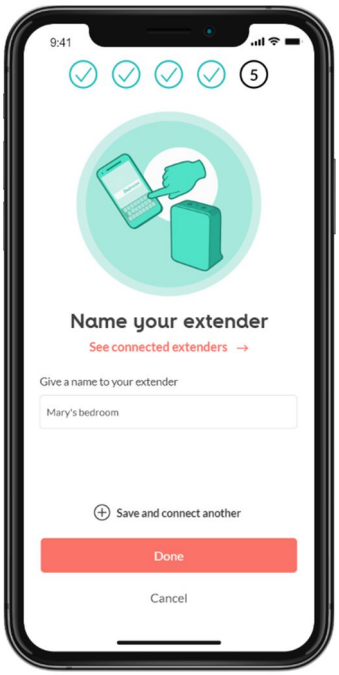

Figure 16 – Name your extender

4.4 OnBording

After all the initial configurations, it is possible to take advantage of all the features of the Wi-Fi smart mesh application. We can group these features into four groups:
Extended Wi-Fi network, network access control (parental control), guest network, and user autonomy.

Figure 17 – OnBording

4.4.1 Full Wi-Fi coverage

It is possible to analyze the Wi-Fi signal in order to find areas without coverage, in order to optimize the placement of extenders.

Figure 18 – Full Wi-Fi coverage

4.4.2 Parental control

Create your own profiles and quickly limit or check the internet usage of family members or groups.

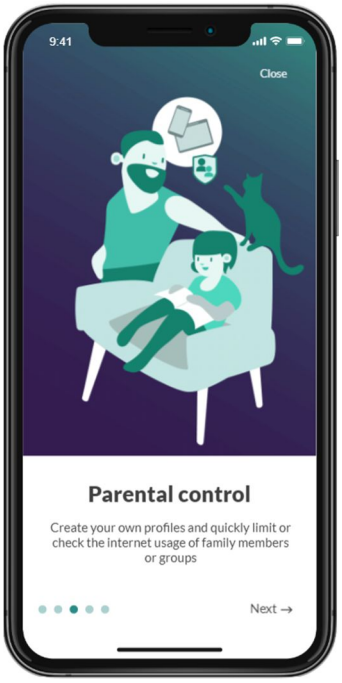

Figure 19 – Parental control

4.4.3 Guest Network

Share your network with your guest without losing your device´s privacy.

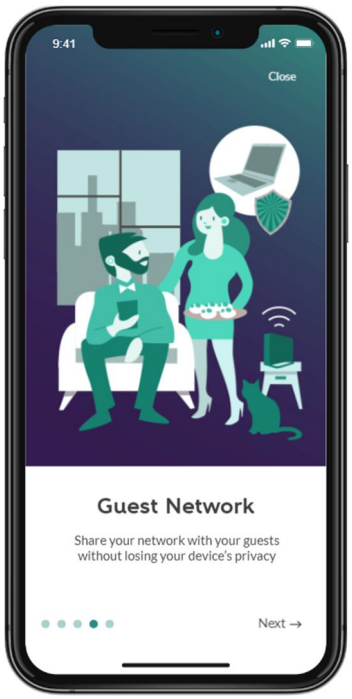

Figure 20 – Guest Network

4.4.4 Customer autonomy

Use your Smart Wi-Fi app to optimize your network with total autonomy.

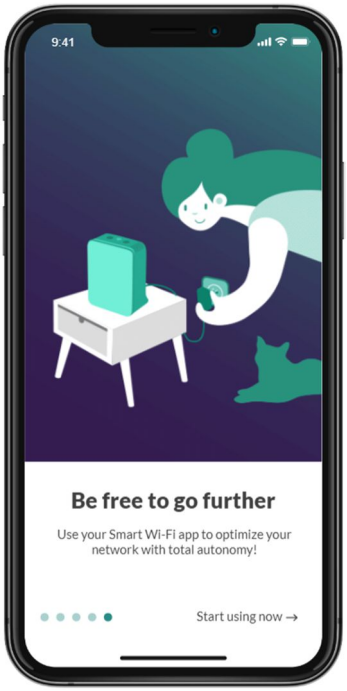

Figure 21 – Customer autonomy

4.5 Home Network

This screen contains two main areas, namely: One with the topology of the home network, and the other with more information about the various elements of the home network, characteristics of the devices, and general information on data traffic. The network topology shows the available Gateway and Extenders. In the detail window there are eight buttons, four on the bottom line (Home, Internet, Devices, Profiles) and four on the top line (Internet Pause, Share Wi-Fi, Activate Guest, Shortcuts). It is possible to access more information by pressing the "up" symbol, followed by detailed information about the network, devices, nodes and general configurations. Pressing the "down" symbol shows only the eight buttons.

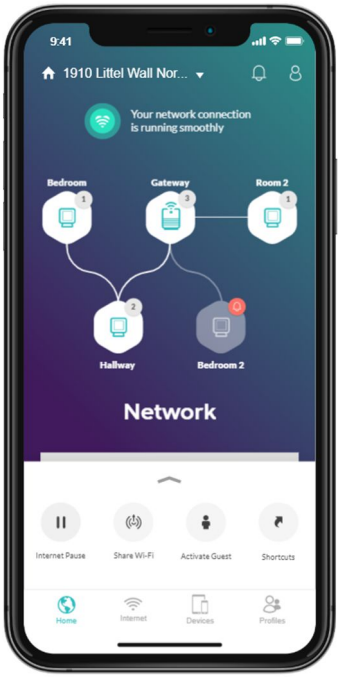

Figure 22 – Home Network

4.5.1 New topology

This screen displays a new network topology.

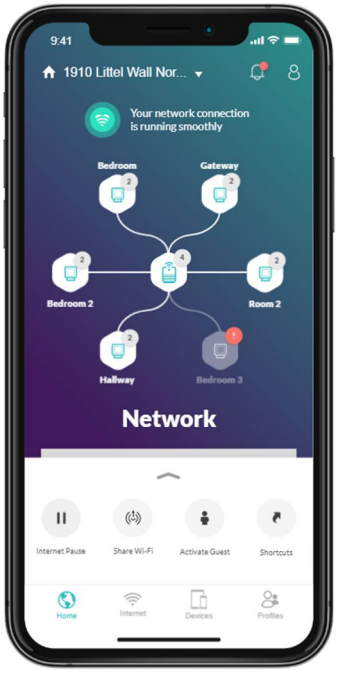

Figure 23 – New topology

4.5.2 Network detail

By expanding the bottom window, you gain access to a set of features, namely:

1. Display of network speeds, downward / upward
2. Add a new extender
3. Available nodes
4. Connected devices
5. Access control and profiles
6. Restart network

   By restarting your gateway, your network will be unavailable for about one minute. You´ll be patient and wait for the operation to be done until you can interact with Smart Wi-Fi app.

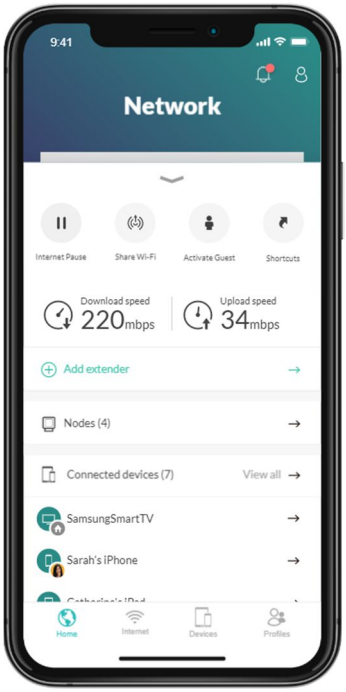

Figura 24 – Detalhe da rede

4.5.3 Internet Pause

n this screen we can execute a set of functionalities regarding the interruption of access to devices on the internet. This access interruption has a time limit previously defined in the "Pause time" button. We can select device by device or a global selection.

Note: These features do not affect the device on which the Smart Wi-Fi App is running.

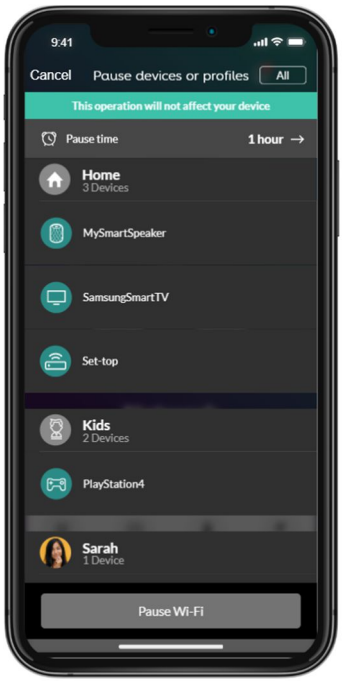

Figura 25 – Internet Pause

4.5.4 Share Wi-Fi

This screen shows the information needed to share access to the Wi-Fi network. The information is shown using a QR code and also with the network name and password.

By pressing the "Share" bar, you can access messaging applications that can be used to share network information.

Figura 26 – Share Wi-Fi

4.5.5 Activate guest network

This screen contains the functionality that allows the activation of guests on the network, maintaining the privacy of the devices on the private network.

Guests only have access to the gateway's coverage area.

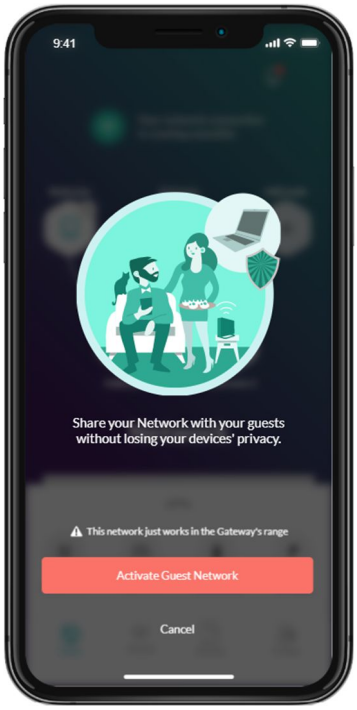

Figura 27 – Ativar convidado

Rua Eng. José Ferreira Pinto Basto
3810-106 Aveiro
Portugal

Tel.: +351 234 403 200
Fax: +351 234 424 723

www.alticelabs.com

297x105

IN THE BOX

Smart Wi-Fi Extender 1
Power Supply Unit 2
Quick Guide x

HOW TO CONNECT YOUR NEW SMART Wi-Fi EXTENDER

MANUAL INSTALLATION IN 2 STEPS

1. Pairing the Smart Wi-Fi Extender
Plug your extender into a power outlet near your router.
If the buttons remain off, press the power button to start your extender.
Wait for the light to flash red.
Press the **WPS** button on your extender and the WPS button on your router.
Wait until the light is solid white.
Your extender is paired, you can now disconnect it.

2. Position the extender
Place the extender in the desired location and plug it on. For best results, connect your extender halfway between your router and the area to be covered by WiFi .

If the light is solid white, the installation is complete.

If the light flashes white or is solid red, move the extender closer to your router.

Icon Color	Description
Off	Press this button to turn on
On	To turn off, press this button until the lights go off
Off	The WiFi is disabled
Flashing red	The extender is not paired with the router
Flashing white	Poor connection between extender and router
Red	No connection between extender and router
White	Good connection to the router
WPS Off	Automatic pairing is not available
WPS Flashing white	Pairing in progress
WPS White	Automatic pairing is available

DECLARATION OF CONFORMITY

https://www.alticelabs.com/en/connectivity.html

Aveiro - Portugal
Rua Eng. José Ferreira Pinto Basto
3810 - 106 Aveiro (Portugal)

www.alticelabs.com

April 2020

5 607467 108819

FEDERAL COMMUNICATION COMMISSION (FCC) INTERFERENCE STATEMENT

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC CAUTION:
The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment. IEEE 802 11b or 802 11g operation of this product in the USA is firmware limited to channel 1–11. This device is restricted for indoor use.

Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body. This device and it's antennas(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

5GHz Wireless Statement:
For operation within the 5.15–5.25GHz and 5.725-5.85 GHz frequency ranges, this device is restricted to indoor environments.
This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Safety Warnings:
The Smart Wi-Fi Extender is a device that uses passive cooling, to avoid overheating please do not block the ventilation holes.
Environmental conditions to be complied with at the installation site: humidity (0% to 95%) and temperature (41°F to 104°F).

Smart Wi-Fi Extender
Quick Guide