FAGOR
ELECTRÓNICA

360 degrees of immersion:
Your complete multimedia experience

▶ FAGOR MULTIMEDIA SOLUTIONS

Multimedia
platform

TV reception
and hedends

BYOE
Bring your own
entertainment

Connectivity and
networks

Other
solutions

Customer
success

FAGOR
MULTIMEDIA
SOLUTIONS

Together, further

Dear customer,

Fagor Electrónica is pleased to announce the recent acquisition of Triax Digital Solutions, formerly IKUSI Multimedia. With this operation, we reinforce our technological capabilities in order to offer a better global offer to our customers. We are also consolidating our position as a reference supplier in the telecommunications infrastructure solutions sector.

An opportunity to advance in the strategic objectives of diversification and growth towards new value propositions and markets, in a coherent way with the commitment to maintain employment and the rooting of the activity.

As a result of the merger between Triax Digital Solutions and the signal processing unit of Fagor Electrónica, Fagor Multimedia Solutions is born. The new company has its headquarters in the Head Quarters of Arrasate-Mondragón (Gipuzkoa) and will maintain two work sites in the Gipuzkoan towns of Arrasate-Mondragón and Astigarraga.

The team will be made up of people from Fagor's multimedia business and the current staff of Triax Digital Solutions, a combination of talents that will make us stronger and increase our ability to create value for our customers. Because in Fagor Multimedia Solutions we integrate the deep experience of both companies in the telecommunications infrastructure sector.

A sector that -we are all aware-, in recent years is undergoing a profound transformation that will be even greater in the near future.with this commitment, in addition, from Fagor Electrónica we reinforce our commitment to our professional customers in the telecommunications installation, electrical distribution and specialist, as well as with engineers and designers in the field of telecommunications.

Thank you for continuing by our side in this new stage.

Gorka Guerra
General Manager
Fagor Multimedia Solutions

FAGOR ELECTRÓNICA | **IKUSI**

Fagor Multimedia Solutions, your ally towards digital transformation

Welcome to Fagor Multimedia Solutions, where digital transformation comes to life! In an increasingly connected and technological world, we know that digitalisation is fundamental to business success. With a wide range of innovative products and services, we are here to accompany you every step of the way towards greater digital maturity for your business.

From customised multimedia solutions to specialised consulting services, our team is committed to providing you with the tools and expertise you need to boost your online presence, optimise internal processes and improve the customer experience. At Fagor Multimedia Solutions, we don't just provide products and services, we deliver tangible results!

Fagor Connect is a dynamic ecosystem that gives you the tools you need to thrive in today's digital world while defining the strategic direction of your business' future. From content management to process automation, our solution enables you to effectively connect with your audience, improve operational efficiency and achieve your business goals with confidence.

With decades of market experience and a customer-centric approach, we're ready to help you make the most of the opportunities the digital world has to offer. Join us on this exciting journey to digital excellence and discover how we can take your business to the next level - with

Fagor Multimedia Solutions, your digital transformation is guaranteed!
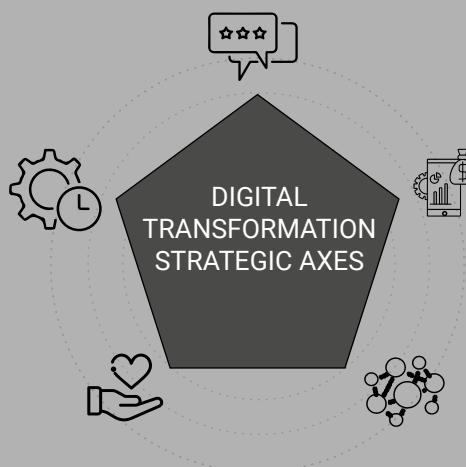
Strategic axes

1. IMPROVE CUSTOMER EXPERIENCE
We open the doors to new customers and customer loyalty.

2. BOOST OPERATIONAL EFFICIENCY
We help you to be more efficient in your operations and processes.

3. INCREASE INCOME We offer you new sources of recurring income.

DIGITAL TRANSFORMATION STRATEGIC AXES
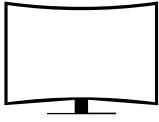
4. ENABLES SYSTEM INTEROPERABILITY It is interoperable and integrable with multiple systems and vendors.

5. ASSURES LIFECYCLE SERVICES
As a key business partner, we ensure service throughout the entire lifecycle.

How do we do it?

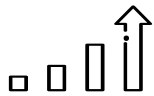At Fagor Multimedia Solutions we accompany the customer throughout the whole life cycle.

Design

This is the most important phase to ensure the success of the solution. To do this:

- We study your business model to define the added value that most differentiates you.
- We advise you on the management and design of content from the vision of experts.
- We co-create with you to create a tailor-made and fully customised solution.

and we focus the solution with the aim of growing and making Fagor Multimedia Solutions your successful partner.

Implementation

Each project has its own needs and there is a solution for each one. Together we will find the most suitable solution for the implementation of the platform.
- Project management, to carry out an efficient and coordinated installation.
- Collaboration with integrators to optimise thevalue chain.
- Technical equipment to back up any unforeseen event.
- Staff training and empowerment.
- Remote support.
- Certification and tuning.

Growth

The design phase is just as important as the project phase. Fagor Connect is an ecosystem that adapts to the needs of the business as it grows.
- It is a fully scalable ecosystem, both in terms of upgrades and integration of new solutions.
Sectors
- It has an implementation service that guarantees

customer satisfaction through technical support.
- And maintenance service, according to needs.
We take care of every detail of your project, as if the business were our own, because the success of our customers is the success of Fagor Connect...

Sectors

HOSPITALITY

HEALTH

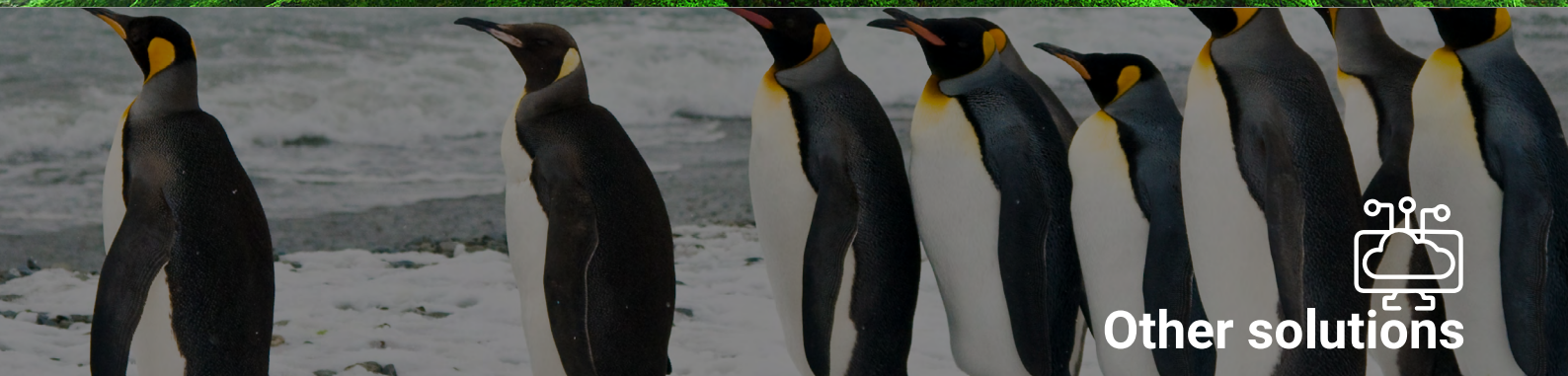**SPORTS & ENTERTAINMENT**

INSTITUTIONS

MEDIA & BROADCASTERS
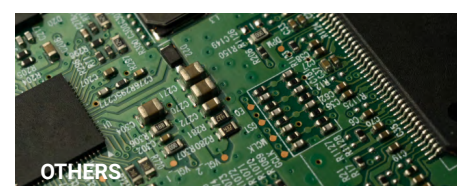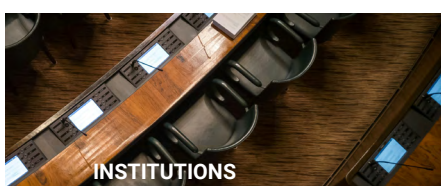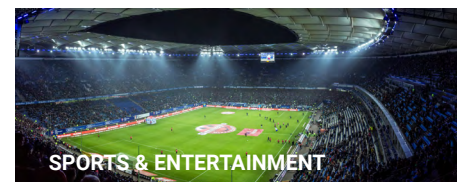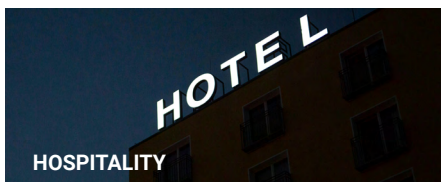
OTHERS

Multimedia Plataform

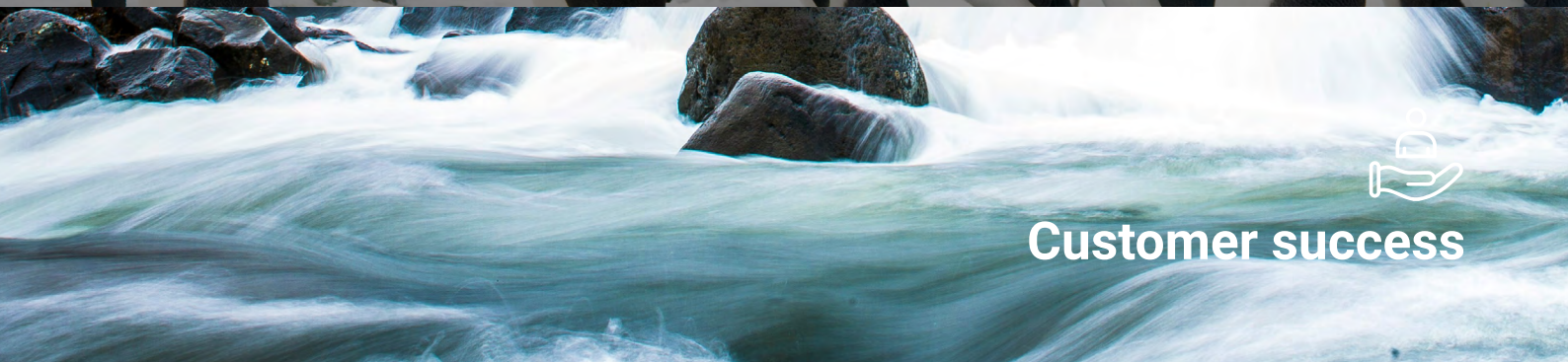**TV reception & Headends**

BYOE Bring your own entertainment

Connectivity & networks

Other solutions

Customer success

Multimedia platform

Optimise your users' experience with our multimedia platform, providing a universe of entertainment, information and comfort at their fingertips, ensuring an unforgettable and exceptional experience.
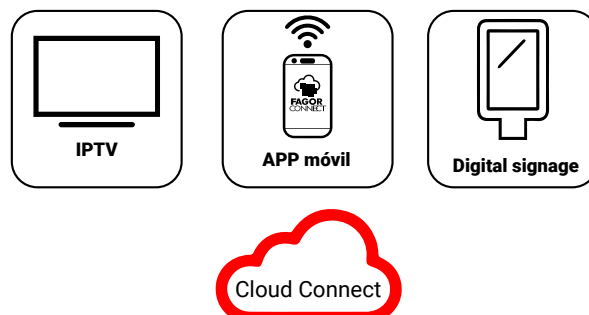
IPTV
**MOBILE APP DIGITAL**
SIGNAGE

Elements

The multimedia platform is hosted on a Cloud server, which manages the contents of the different devices towards the user and the additional services for the best use of the business operation.

IPTV

APP móvil

Digital signage

Cloud Connect

IPTV solution

It consists of basic services and a menu of additional modules based on licences ordered on demand.
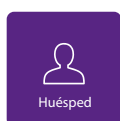
All this is managed from the Fagor Connect Cloud. For non-hospitality TVs, a Set-top Box with its licence is required. For other cases, hybrid alternatives will be sought.

TV y entretenimiento
- TV
- Radio
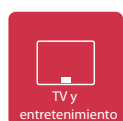
Hotel y servicios
- Directory of services
- Daily topic
- Activities
- Announcements
- Facilities
- Offer
- Contacts

Huésped
- Message
- Profile
- Alarm clock
- Preferences

Información
- Flight Information
- Bus Information
- Weather Information

Ajustes
- Language
- Parental Guidance
- Erase My Data
- Reset
- Network Information

REF.	MOD.	DESCRIPTION
SOFTWARE		
10101	FC ILR	Fagor Connect Basic STB
10121	FC SLR	Fagor Connect Basic SmartTV
10210	CSU 001	Cloud Connect server
HARDWARE		
10001	ICONN 200	STB room
10041	LSR HP V1	Local V1 server

CLOUD SERVER

LOCAL SERVER*

IPTV/ SMART TV

SET TOP BOX

TV STANDARD

Compatible TVs

LG   PHILIPS   SAMSUNG
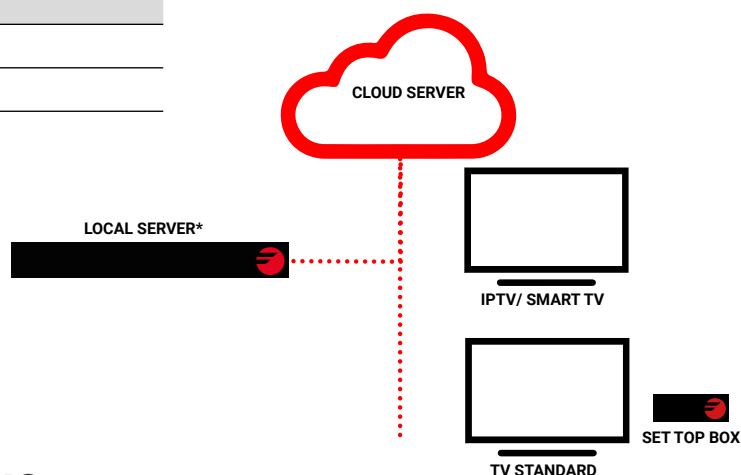
TV & ENTERTAINMENT

- **TV Channels:** terrestrial and satellite on request of the hotel.
- **Radio Channels:** all streaming radio channels can be played on TV.
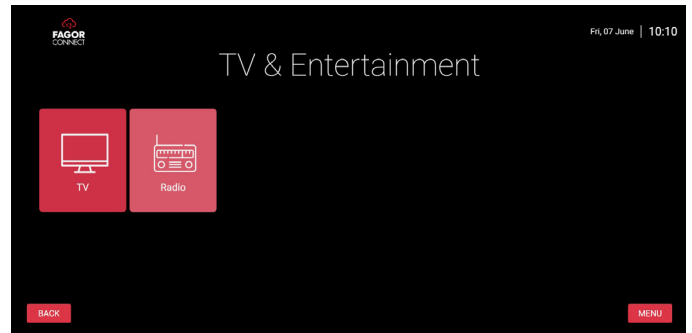- **Corporate channel:** channel offering relevant information and services of the hotel/guests

TV & ENTERTAINMENT

TV

Hotel & Services

- **Services directory:** description of the services offered by the hotel, opening hours, wifi, check in, check out, housekeeping, room service, etc.
- **Daily program:** in the case of having different activities, to have each day what activities there are.
- **Activities:** information on programmed activities.
- Advertisements: own advertisements and personalized to the guest according to the season.
- **Facilities:** information on facilities and opening hours.
- **Offers:** you can program offers throughout the year that the hotel may have, for example restaurant offers, breakfasts...
- **Contacts**: information on all hotel contacts, from reception, restaurant, gym, to emergencies, etc...
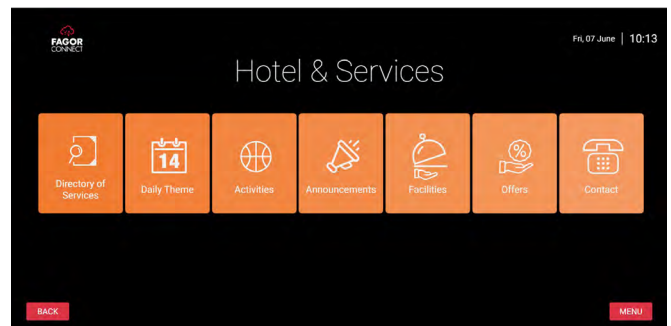
HOTEL & SERVICES
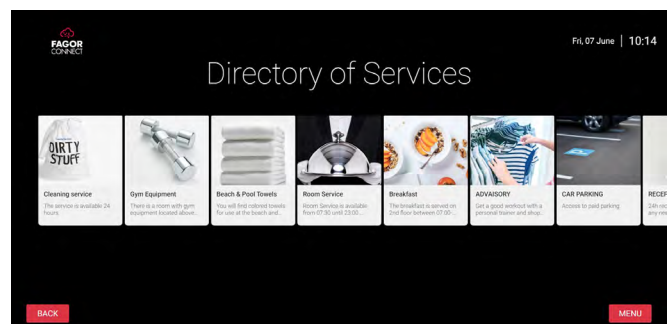
SERVICE DIRECTORY

IPTV solution

Guest

Huésped
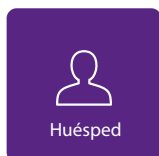
- **Message:** general or personalized messages can be sent from the hotel to guests, logistics messages, popup offers or inquiries at the front desk. A welcome message can be configured with the guest's name and surname.
- **Alarm clock**: a digital clock to be awakened from reception.
- **Preferences**: for regular customers, their preferences can be identified.
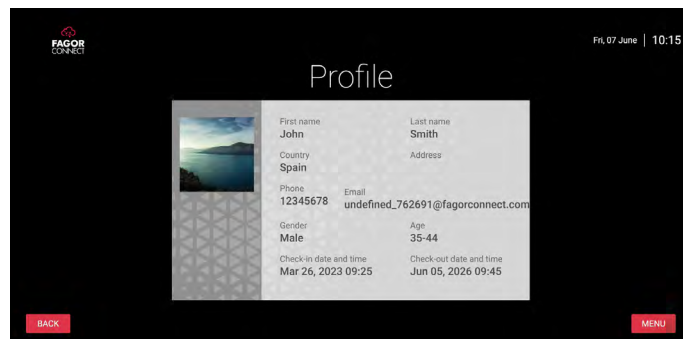
MESSAGE
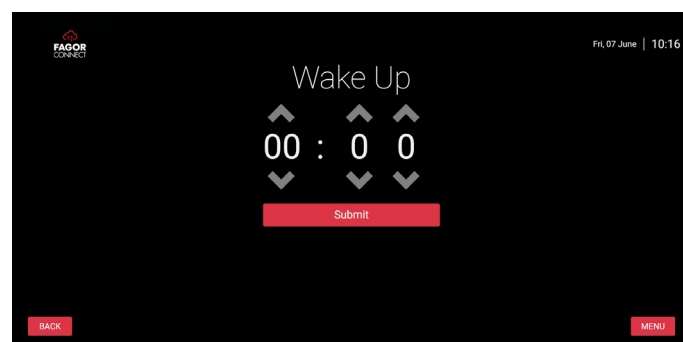
AWAKENER

Information

Información

- **Flight information:** flight information for airports in the area.
- **Bus information**: bus information for to be able to move in the dest ination**.**
- **Meteorological information:** from the place where you are located.
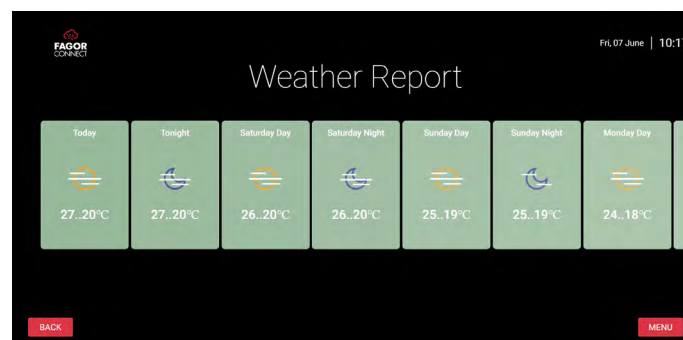
METEOROLOGICAL INFORMATION

Fagor Connect Addons Modules

Additional modules based on licenses with an **annual fee**, which customizes the solution for each hotel. Add-on modules are additional services for the IPTV solution, the Fagor Connect App and/or digital signage.

These modules can be integrated into the solution as needed flexible, in order to expand services according to the hotel's needs.

| Ref.	Mod.	Product	Description	Support
10300	FMO-010	PMS Integration	Integration of the PMS in the Fagor Connect solution.	
10319	FMO-029	Cast Connect	TV casting service.	
10305	FMO-015	Room service/ordering	Ordering system.	
10303	FMO-013	Reservations	Reservation system for available services.	
10302	FMO-012	Questionnaires	Digital questionnaires for business evaluation of hotel services.	
10307	FMO-017	Concierge	Chat service between customers and hotel employees.	
10306	FMO-016	Loyalty system	Customer loyalty system for points and rewards.	
10308	FMO-018	POI- Points of Interest	Visualisation of points of interest in the environment.	
10324	FMO-034	Domotic integration	Intelligent room control for automations.	
10309	FMO-019	Conference calendar (Timeline)	Display of the conference calendar (Timeline) and activities.	
10311	FMO-021	Self-check-in form	Online check-in form prior to arrival.	

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FMO-010
PMS integration
Ref: 10300

Integration of the PMS in the Fagor Connect solution.
- Personalise the welcome message automatically.
- Reception in the guest's language, reorganises the TV and radio channels according to the language.
- The entire platform automatically switches to the guest's language.
- Generates the invoice as the guest makes use of the hotel services (POS integration).
- With the check in and check out the cleaning of all guest data.
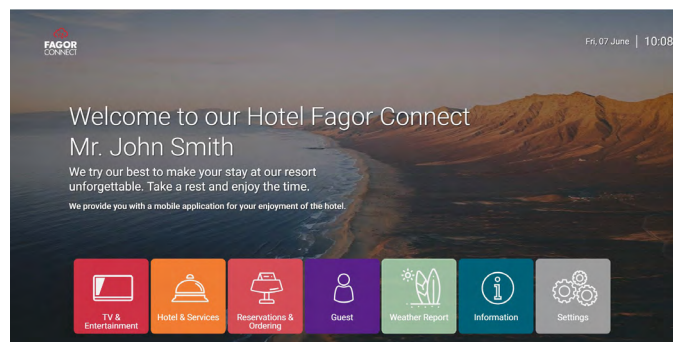
FMO-029
Cast Connect
Ref: 10319

Professional casting system to easily share your favorite series, movies, music, news and sports from your personal device to your bedroom TV.

Integration into the hotel's existing WiFi network makes it easy to connect your mobile device to the TV through a simple QR code scan.
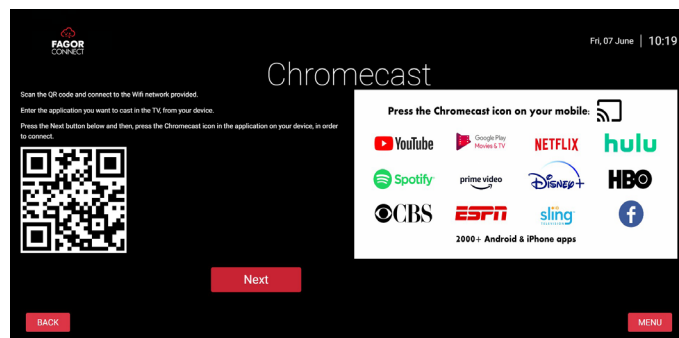
FMO-015
Room service/ordering
Ref: 10305

This module allows you to order services from the hotel staff, integrating your POS ordering systems.

www.fagorelectronica.com

FAGOR ELECTRÓNICA | IKUSI
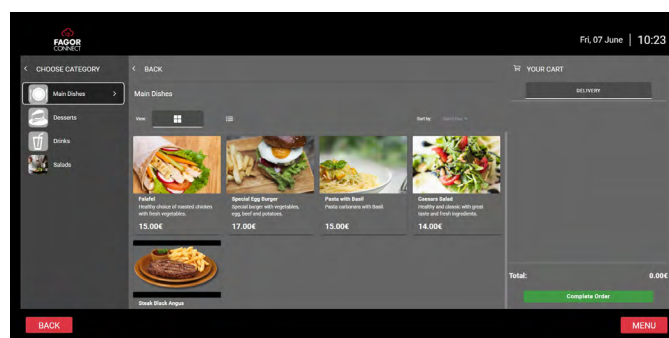
FMO-013
Reservations
Ref: 10303

Reservation of hotel facilities, such as tennis court, spa, swimming pool. also with the possibility of integrating your own reservation system.
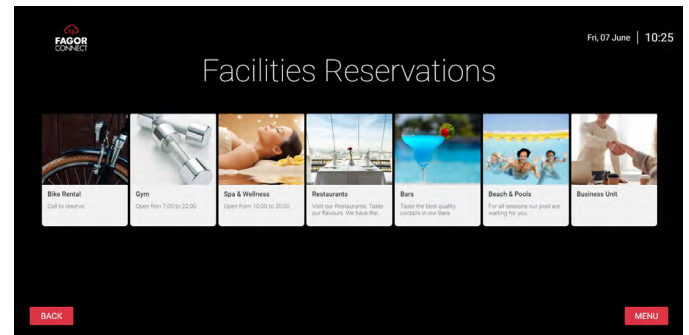
FMO-012
Questionnaire
Ref: 10302

After the activities or the stay in the hotel, receive a satisfaction questionnaire to collect feedback of the experience. This gives extra information to the hotel to improve the offer, more adapted to the target audience.
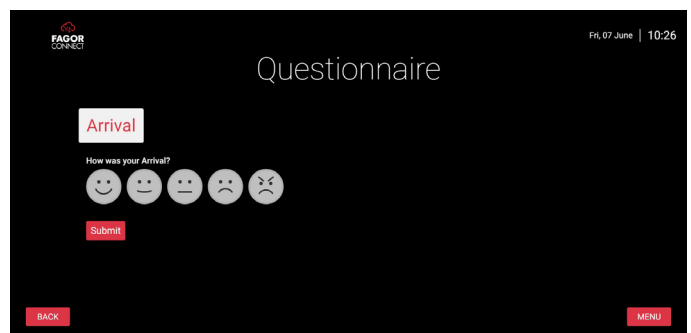
FMO-012
Janitor
Ref: 10307

Instant communication with the guest from anywhere in the Hotel. Efficient and effective coordination, with direct chats between the Hotel staff so that the guest lacks nothing.
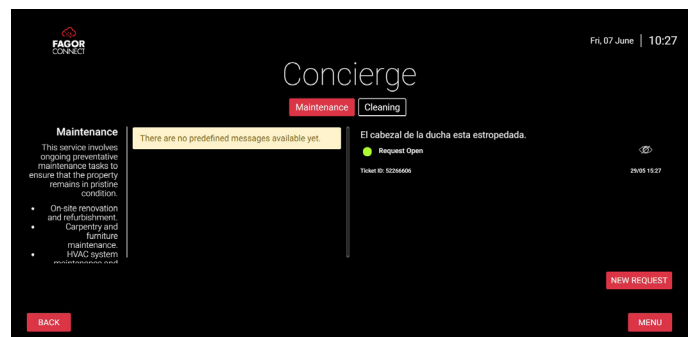
FMO-016
Loyalty system
Ref: 10306

Loyalty program for the chain's most frequent and loyal guests.

www.fagorelectronica.com
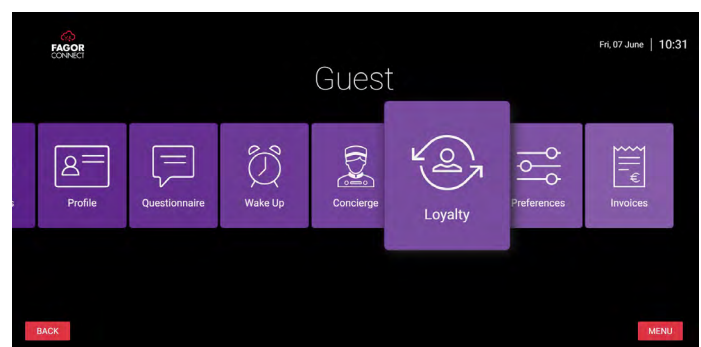
FMO-018
Points of interest
Ref: 10308

The hotel can choose which points of interest in the area it wants to promote and/or adapt the points of interest to the type of guest. A showcase for crosselling and promoting surrounding businesses.
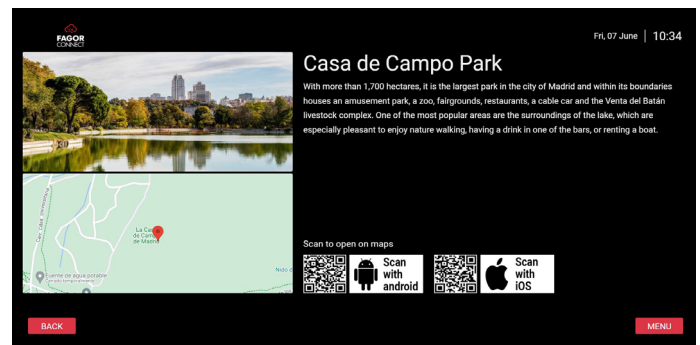
FMO-034
KNX interface
Ref: 10324

The user can control lights, curtains, room temperature... via cell phone or app

- Light: OFF/ON
- Air conditioning: degrees up and down
- Access doors: codes, pin depending on the system
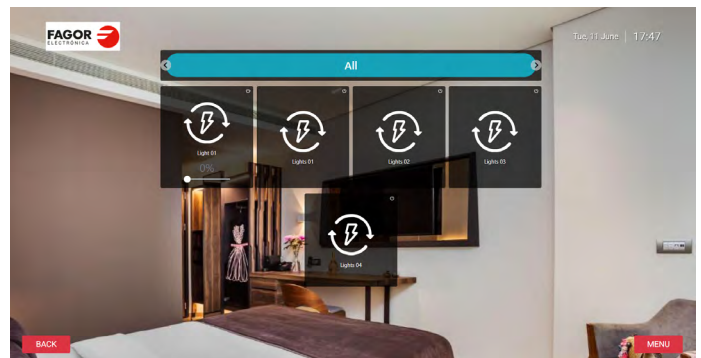
FMO-019
Conference Calendar (Timeline)
Ref: 10309

It visually indicates where, at what time and the name of the event in each event or meeting room of the Hotel.

FMO-021
Self-checking form
Ref: 10311

In order to avoid wasting guests' time upon arrival, they can be informed of the possibility of self-checking in and making their arrival at their destination easier.

Fagor Connect App

FAGOR CONNECT
APP

Messages with reception, notifications, booking a yoga class or a guide to the most interesting places to visit, these are just some of the services that can be made available to the guest thanks to the hotel's mobile app.

Compatible with android and IOS.

REF.	MOD.	DESCRIPTION
SOFTWARE		
10210	CSU 001	Cloud Connect server
10301	FMO-011	App

CLOUD CONNECT

APP

www.fagorelectronica.com

Fagor Connect Signage
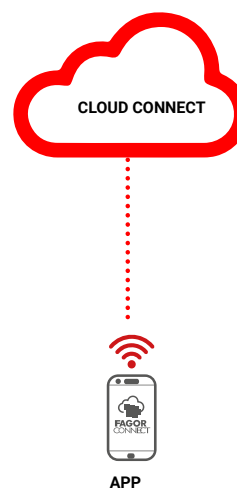
FAGOR CONNECT
DIGITAL SIGNAGE
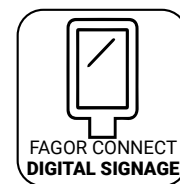
Can you imagine being able to centrally manage all the hotel's information screens? With our touch totem, timeline, customised signage and promotions solution, each screen becomes a strategic point of information and advertising.

From our server, the process of designing and creating content for guests becomes easier and more intuitive than ever. You can control external advertising, promote activities, display internal offers, broadcast the corporate channel, and much more! Centralised management gives you total control over the information and advertising experience in every corner of the hotel.

REF.	MOD.	DESCRIPTION
SOFTWARE		
10141	FC ILS	Fagor Connect digital signage
10210	CSU 001	Cloud Connect server
HARDWARE		
10002	ICONN 200S	STB Fagor Connect for digital signage*

*It is not an essential requirement. Consult depending on each installation.

CLOUD SERVER

signage / TV STANDARD / SET TOP BOX* / IPTV/ SMART TV

Fagor Connect Corporate Channel

FAGOR CONNECT
CORPORATE CHANNEL
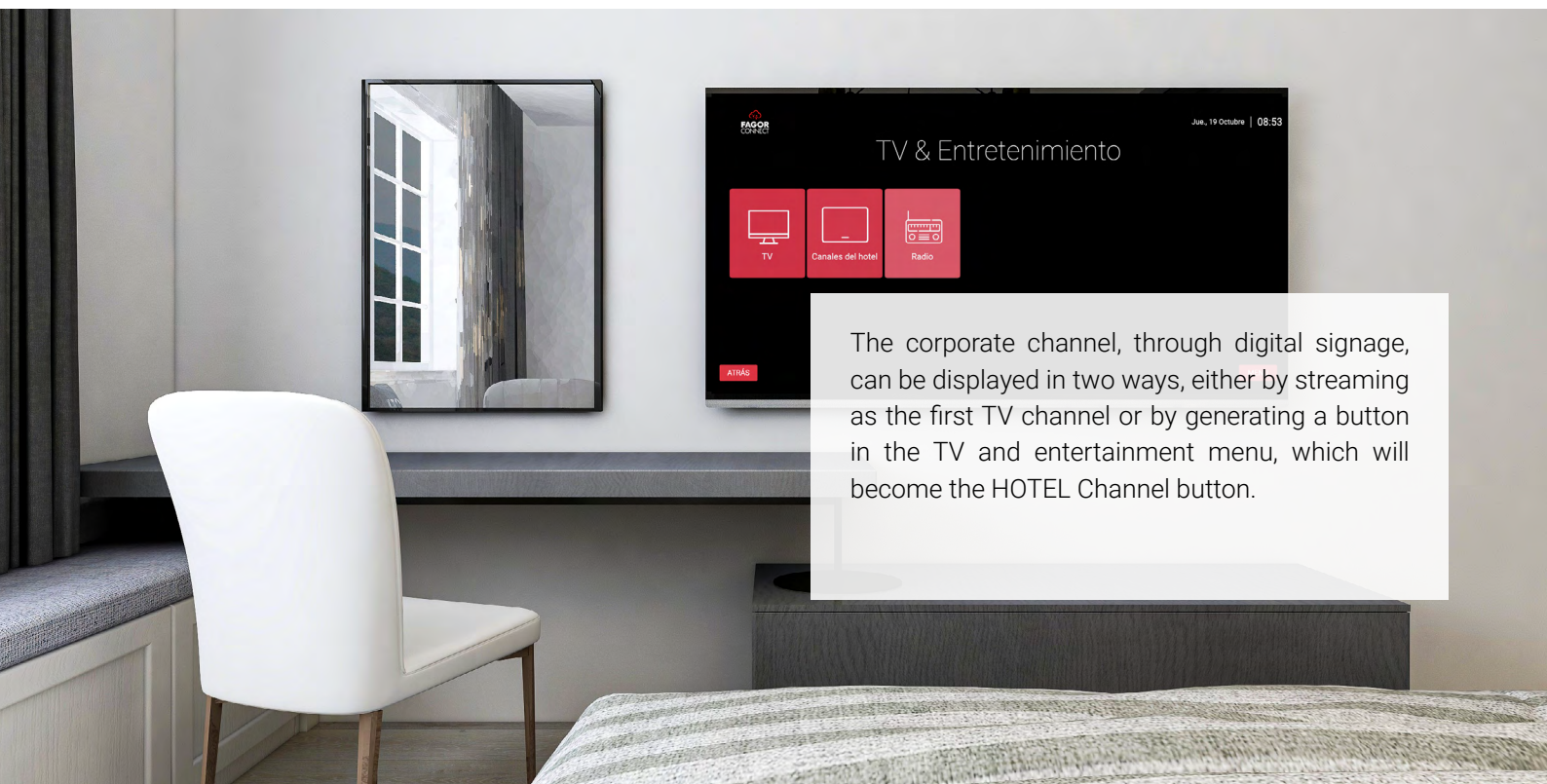
The corporate channel, through digital signage, can be displayed in two ways, either by streaming as the first TV channel or by generating a button in the TV and entertainment menu, which will become the HOTEL Channel button.

REF.	MOD.	DESCRIPTION
SOFTWARE		
10141	FC ILS	Fagor Connect digital signage
10210	CSU 001	Cloud Connect server
HARDWARE		
10002	ICONN 200S	STB Fagor Connect for digital signage*
10020	HCC 200	HDMI for STB
86541	HTT 103	HDMI-COFDM Digital modulator RF output

*It is not an essential requirement. Consult depending on each installation.

FAGOR ELECTRÓNICA | IKUSI
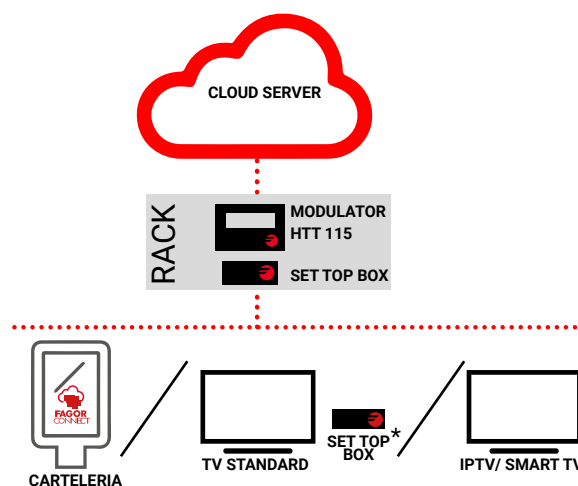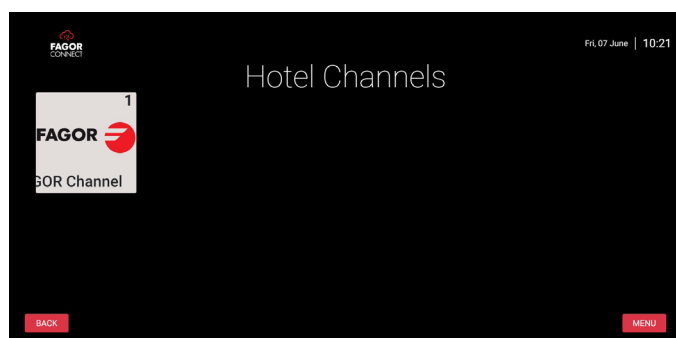
Example of application in the hospitality sector

The digital guest journey

Fagor Connect is a multimedia services platform compatible with your hotel management system.

In Fagor Electrónica, we are experts in the development and implementation of services specially designed for the Hospitality sector.

We provide the best guest experience, thanks to efficient high-capacity fiber networks (GPON) combined with interactive entertainment in guest rooms (IPTV services, casting…).

Our extensive experience in the development of integral communications infrastructures allows the hotel establishment to offer all the services currently demanded by customers, and those that will be implemented in the future, obtaining additional advantages and a total user experience.

1 AIRPORT — FAGOR CONNECT APP

2 RECEPTION — AUTO CHECK-IN

3 HIGH SPEED WIFI — DIGITAL KEY

4 ROOM — PERSONALIZED INTERACTIVE TV — CAST CONNECT — SMART ROOM

5 COMMON AREAS — INFO SCREENS

6 DIGITAL STAFF — Reservation control, cleaning, gauging, courier services
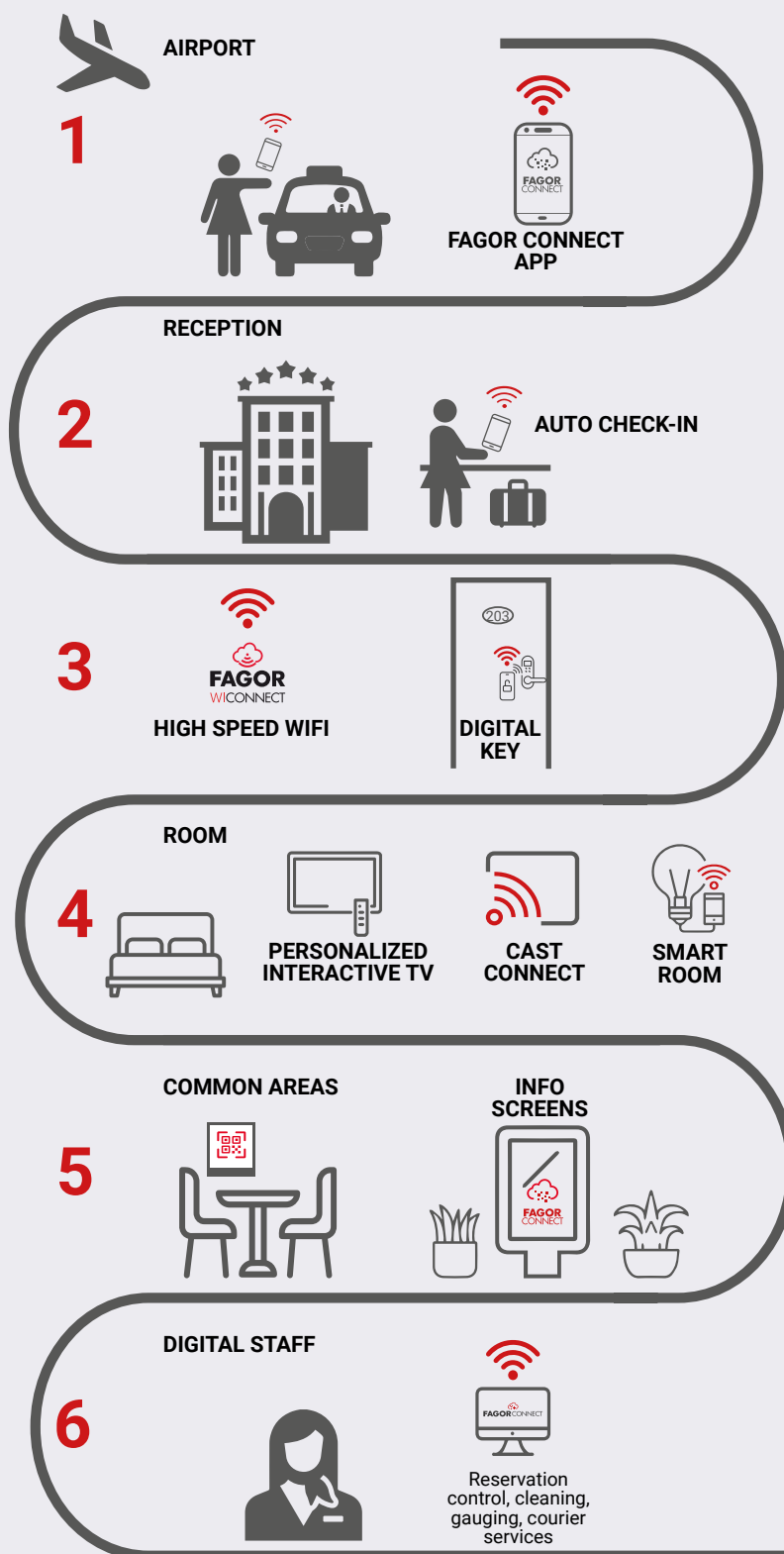
Example of application in the hospitality sector

The servers and software allow us to act in a centralized way with cloud solution on the system configuration, to keep the services up to date, as well as not having to apply the changes on each of the TVs.

The configuration and maintenance is done on the server and the changes will automatically be reflected on the TVs.

Features of FAGOR CONNECT:
• Configuration from the web server (cloud) of all televisions in the hotel.
• Possibility of sorting the list of channels by language according to guest profile by nationality, or preferred language, obtaining the information thanks to the integration with the PMS.
• Personalization of the welcome message with the guest's name automatically, thanks to integration with PMS.
• Inclusion of the brand's corporate channel.
• Casting service.
• Services offered by the hotel in different formats.
• Possibility to book hotel services (SPA, restaurant, Gym, etc).
• Create room orders.
• Chat with concierge.
• Messaging.
• Promotions and announcements of new openings.
• Points of interest in the area surrounding the Hotel.
• Room automation integration (with KNX).
• Invoicing consultation (electronic invoicing).
• Loyalty system.
• Satisfaction questionnaires.
• Captive portal for Wifi (WiConnect).
• Weather information.
• Digital signage management, in touch totems or TV.
• Mobile application for Android and iOS.
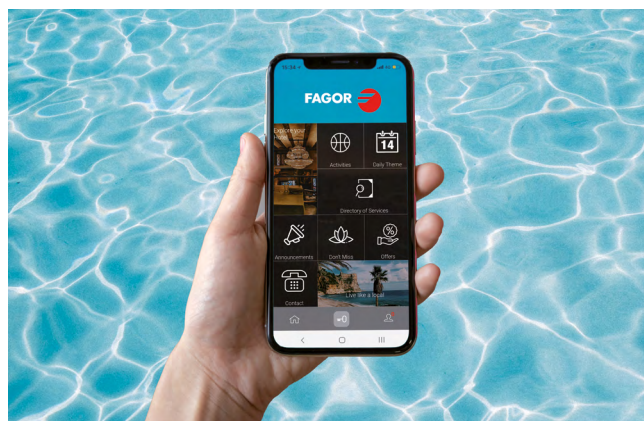
The installation consists of:
• IPTV headend for TV and Radio services.
• A server in the cloud.
• Receiving system consisting of 1 terrestrial antenna for receiving terrestrial services, satellite dishes for satellite services and a multiswitch that will allow us to change the configuration at any time without having to modify the input connections.
• Modulator to upload information and/or videos from the Hotel's corporate channel.
• Local server where the information is downloaded from the system and from the cloud server to have fast response times when loading information and channels.
• Network electronics consisting of a 26-port switch to centralize all the outputs of the IPTV equipment and a router for remote management of the entire system.
• Dongle Chromecast devices with their brackets behind the TV to be hidden from the guest's view and prevent possible theft.
• The licenses of use and configuration of the services.

The whole system is scalable for future changes or expansions, both in number of devices and in services or TV/Radio channels.

Installation example

compatible with

IKUSI

SIT 8000

TIT 8000

**MODULATOR
HTT 115**

**CLOUD
server**

SWITCH CORE

ROR-ROUTER

**CORPORATE CHANNEL
SET TOP BOX**

LSR - LOCAL SERVER

OLT 880

COAXIAL CABLE
ETHERNET CABLE
OPTIC FIBER

FOSR

1490 nm
1550 nm

1310 nm

MOBILE DEVICES

PC

PHONE

ONT

ONT

TV

APP

SIGNAGE

CHROMECAST
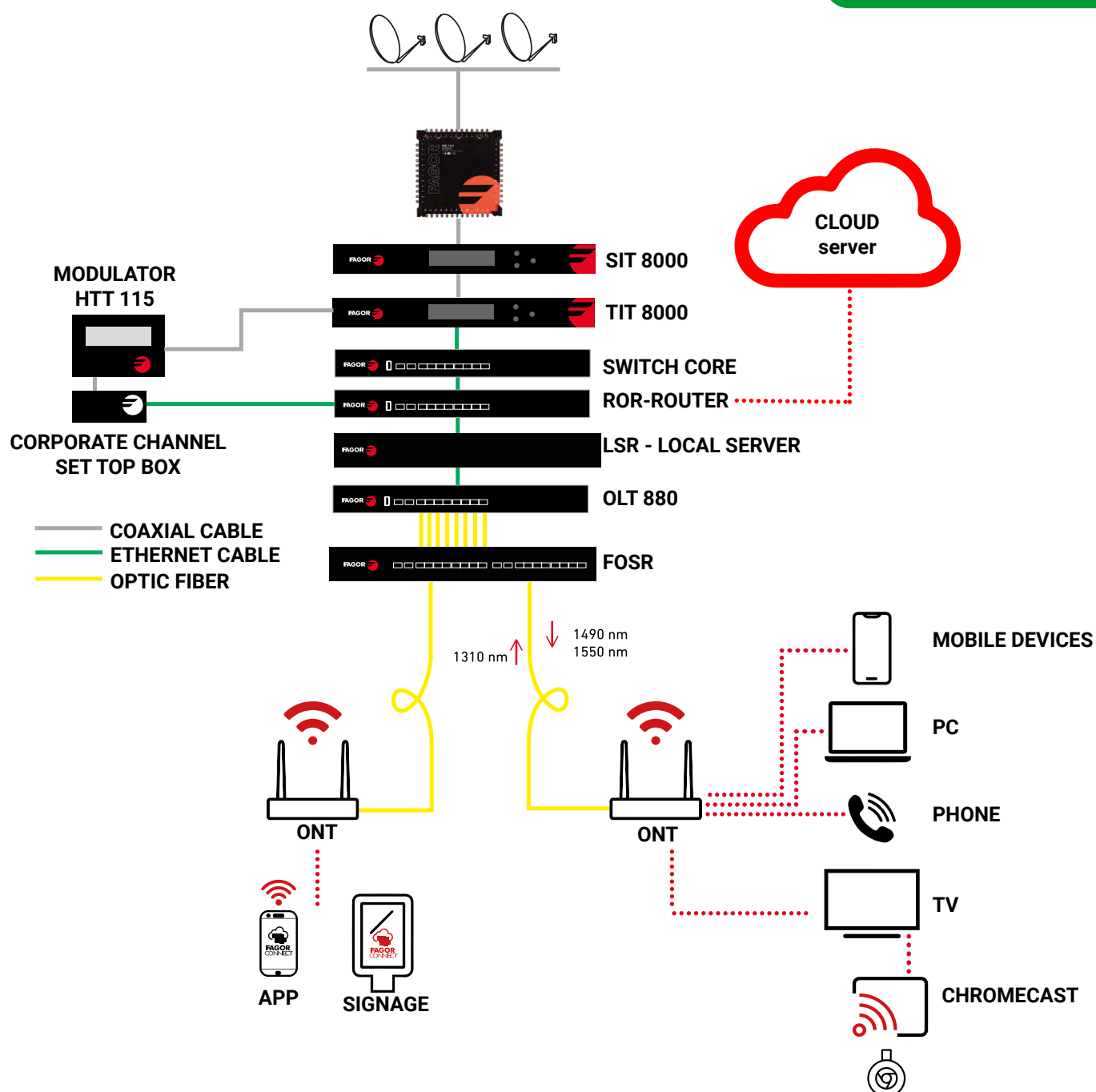
TV reception and headends

Deliver a high quality TV experience and get the most out of your content investment.

FLOW
HTI
TIT series
SIT series
HAN series
ENC-108
ICONN series

FAGOR **IKUSI**
ELECTRÓNICA

IKUSI FLOW
The first Smart TV Headend

Multi-standard Ikusi Flow
adapts to your present and your
future

High density
Small footprint per channel
Capable of processing more than
200 SD services or 120 services
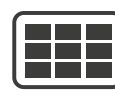
Content management
Manages content, not technical
parameters
User-friendly interface, minimi-
sing configuration time

Double security
Premium content is always pro-
tected by the inclusion of DRM
protection.

One platform for all your TV
needs
Designed to convert any
TV input to any TV output

IKUSI FLOW

FLOW IN4 (Ref. 4319)
Input module. Frontend.
Quadruple tuner.
Universal multi-standard input: DVB S/S2/T/T/T2/C.
Auto scan.
Discovery of the services present on the connected cables
Hot swap without manual reconfiguration.

FLOW ENC + (Ref. 4321)
Encoder module.
4 x HDMI inputs
MPEG4 H.264 or H265 video compression.
Full HD quality.
Up to 40 HDMI
HDMI inputs in a 4RU rack.

FLOW HUB (Ref. 4314)
Platform control unit.
It manages all the internal parameters of the head-end.
Connected head-end: own wifi + LAN interface.
Local and remote access.
Guided configuration through a wizard.
2 x gigabit ethernet ports for IPTV multicast..
Support for back-up modules.

FLOW SEC (Ref. 4311)
Security Management Module.
Decryption (CAS) and encryption (DRM).
2 x CI slots per module.
Manages services coming from any input and going to any output.
Automatic CAM restart in case of decryption failure.
Support up to 15 SPTS per CAM (30 SPTS per module).

FLOW OUT (Ref. 4313)
Output module. Backend.
Universal quad/sextuple and multi-standard DVB-T/DVB-C output.
Up to 8 SPTS per carrier = 32 SPTS per module.
Output level from 78 to 108 dbmV.

FLOW PSU (Ref. 4308)
Platform power supply.
More efficient: Half-bridge technology....
Thermal protection (against external air-conditioning failure) .
Power Factor Corrector.

IKUSI FLOW

FLOW BASE (Ref. 4312)
Platform chassis.
Self-assembled chassis.
19" rack or wall mounting with the same base.
Mounting without tools or accessories.
Actual height of 4RU (including cable glands)...

FLOW COVER (Ref. 4316)
Platform ventilation cover.
Magnetic connection with triple function:
mechanical adjustment, fan power supply and speed control
5 x fans.
Magnetic technology: no noise and no friction.

FLOW RPSU REDUNDANT (Ref. 4320)
Redundant power supply .
Ensures uninterruptible power supply.
Can be replaced without disconnecting from the headend
Integrates two identical power supplies in 1RU chassis.

FLOW IRD Extender (Ref. 1051)

FLOW STB AC3+ (Ref. 4329)
Set-Top-Box to be integrated with Flow Device MGR.
High picture and sound quality.
Fast data processing.
On demand functions.
Programmable control.

REF.	MOD.	DESCRIPTION
4319	FLOW IN 4	Input module. Frontend.
4321	FLOW ENC+	Encoder.
4314	FLOW HUB	Platform control unit.
4311	FLOW SEC	Security Management Module.
4313	FLOW OUT	Output module. Backend.
4308	FLOW PSU	Platform power supply.
4312	FLOW BASE	Plataform chassis.
4316	FLOW COVER	Platform ventilation cover.
4320	FLOW RPSU REDUNDANT	Redundant power supply.
4329	FLOW STB AC3+	Set-Top-Box to be integrated with Flow Device MGR.
1051	FLOW IRD Extender	Extender.

Device Manager

Device Manager is the new Application integrated in Ikusi FLOW that offers centralised management of the contents and devices of the IPTV network, allowing:

Making different lists offering the possibility of sending groups of contents to devices individually or by groupings. Making it possible to control the content available on each of the televisions.

Individually select the content to be played on each viewing device (or multi-screen spaces) remotely, allowing management and control of what is played at each viewing point.

To be able to switch on, switch off and control the sound of the main TV manufacturers. As well as the list of available services, knowing their status and the content that is being played.

Ikusi Device Manager is compatible with the main brands of televisions:

EXAMPLE

INPUT SIGNALS   DVB-T   INTER-   DVB-C   IP   HDMI

SERVICES

Aplicación Device Manager

LAN

Playlist

Playlist

PHILIPS

STB
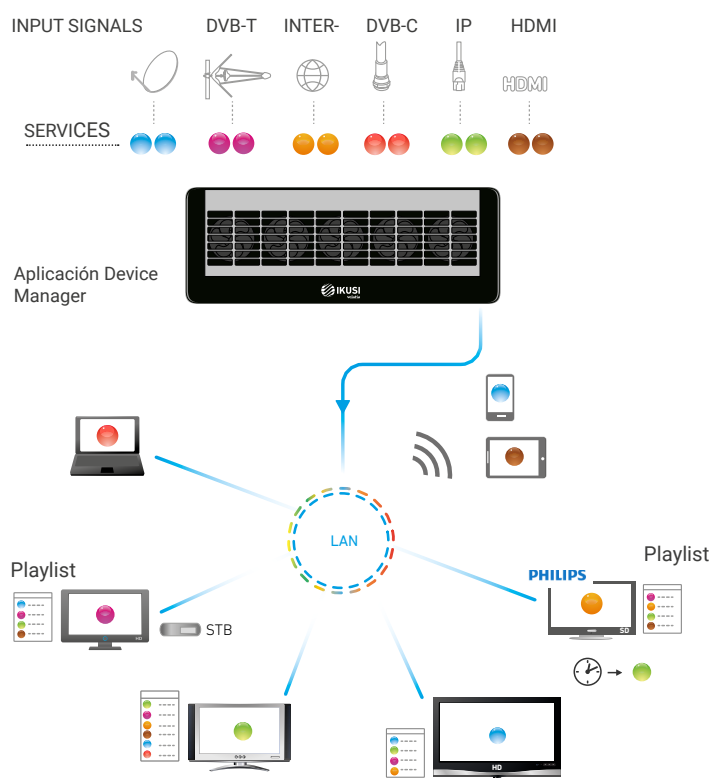
HTI - Universal High Intensity Headend

HTI-424 3863
Quad transmodulator with IPTV.
Receives content from 4 DVB-T/T2, DVB-S/S2, DVB-C or IPTV transponders/multiplex, decrypts it and transmits it on 4 DVB-T or DVB-C output channels or on IPTV.
4 DVB-T or DVB-C output channels or IPTV.
Dual Common Interface and Ethernet Connector.Single input+loop or 4 IP Multicast inputs,
IP Unicast Multistream supported.

HTA-125 3868
Power amplifier: Amplifies RF signals from HTI headends.

PSU-150 3865
Switched mode power supply for powering the HTI head-end modules. HTI head-end modules.

Accessories

BACK-500 3866
Support base for 5 HTI modules

SR-HTI 3867
6U high 19" rack support

USB-300 4284
USB-Ethernet adapter for remote control

REF.	MOD.	DESCRIPTION
3863	HTI-424	Quad transmodulator with IPTV.
3868	HTI-125	Power amplifier.
3865	PSU-150	Power supply.
3866	BACK-500	Support base for 5 HTI modules
3867	SR-HTI	6U high 19" rack support

HTI - Universal High Density Headend

HIGH DENSITY AND FLEXIBILITY
Up to 32 universal DVB inputs per base
Up to 32 RF outputs or 256 IPTV outputs per cradle

IPTV INPUT READY
Up to 32 IPTV inputs per base

ADVANCED ROUTING MATRIX
From any input to any output.
Decryption in any CAM.
No compromises

DVB-S/S2   DVB-T/T2/C

2x Interface

DVB-T
DVB-C

**MULTISTREAM
SUPPORTED+ of 200
additional TV channels**

**CHANNEL
PRE-RESERVATION**
To avoid future
re-tuning of TV sets.

Input/output
IPTV

PSU-150 HTI-404 2xHTI-424 **HTA-125**

USB-300   router   internet   PC

AUDIO SPLITTING
Generation of one
TV channel per audio

INDEPENDENT OUTPUT CHANNELS
Distributed anywhere on the band

**INTERCONNECTED SUPPORT BASE
REDUNDANT POWER SUPPLY**
Power supplied via the backplane, without bridges

FAGOR ELECTRÓNICA | IKUSI

TERRESTRIAL TV TO IP STREAMER
TIT Series

ipolo IP SYSTEM

These transmodulators take services from digital Terrestrial TV channels and, after selecting the desired services, convert them for IPTV distribution into an Ethernet network. Common Interface models allow you to decode encrypted services using CAM modules and subscriber cards.

Example

FEATURES

- The metal case is ready for the 19" rack mounting and has the possibility of adding ventilation fans.
- Each module has two independent streaming outputs with a capacity of more than 12 services each one.
- The modules are programmable through its web server locally or in remote mode.
- PID filtering.
- Possibility of creating services mixing Audio PID's with Video PID's. For instance, two services with the same video but with audio in two different languages.

MODEL		TIT 402	TIT 422
Reference		08245	08246
INPUT			
Inputs		4 (2 +2)	
Standard		DVB-T (EN 300 744, EN 302 755)	
Frequency range	MHz	174 ÷ 862	
Input level	dBµV	47 ÷ 90	
FEC mode		LDPC+BCH/ Convolutional Coding+Reed Solomon	
Code rate		1/2,3/5, 2/3, 3/4,4/5, 5/6, 7/8	
Guard interval		1/4, 1/8, 1/16, 1/32; (19/128, 19/256, 1/128)	
FFT		2K, 8K / 1K, 2K, 4K, 8K, 16K, 32K	
DC pass		Switchable 12Vdc 100mA	
DVB-SI & TS PROCESSING			
Conditional access		NO	EN 50221
Table processing		PAT, PMT, SDT, PID filtering, Service creation and edition	
Output format		SPTS/MPTS	
OUTPUT			
Number		2 independents	
Number of services		32 (2x16)	
Physical interface		Ethernet 100-BaseT over RJ-45 (IEEE 802.3u)	
TCP/IP Streaming protocol		IP multicast (RTP or UDP)	
Signalling protocols		SAP	
CONTROL INTERFACE			
Number		2 independents	
Physical Standard		Ethernet 1000-BaseT over RJ-45	
Protocol		Web Server	

SAT TO IP STREAMER

SIT series

ipolo
IP SYSTEM

These devices take services from satellite transponders and after selecting them, transmit them in IP packages for their distribution in an Ethernet network. The Common Interface models allow to decrypt scrambled services using CAM's and cards with rights.

FEATURES

- The metal case is ready for the 19" rack mounting and has the possibility of adding ventilation fans.
- Each module has two independent streaming outputs with a capacity of more than 12 services each one.
- The modules are programmable through its web server locally or in remote mode.
- PID filtering.
- Possibility of creating services mixing Audio PID's with Video PID's. For instance, two services with the same video but with audio in two different languages.

Example
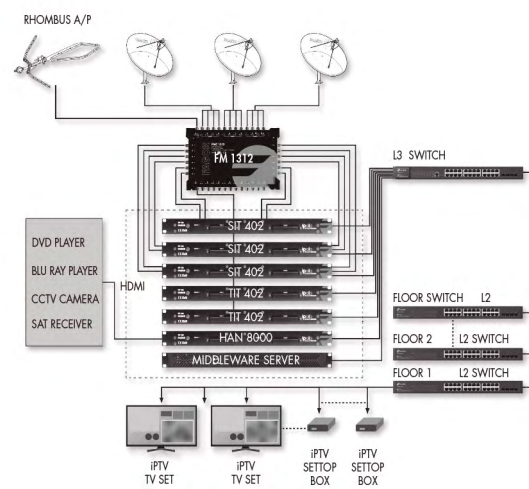
MODEL		SIT 402	SIT 422
Reference		08240	08241
INPUT			
Inputs		4 (2 + 2, Loop or independent)	
Modulation type		QPSK, 8-PSK	
Frequency range	MHz	950 ÷ 2150	
Input level	dBµV	47 ÷ 86	
Symbol Rate	MB	1 ÷ 62 / 1 ÷ 45	
Code rate		1/2, 2/3, 3/5, 3/4, 4/5, 5/6, 7/8, 8/9, 9/10	
Roll-Off		0.15, 0.20, 0.25, 0.35	
LNB control		22 KHz 13/17 V or DiSEqC 1.0	
DVB-SI AND TS PROCESSING			
Conditional access		NO	EN 50221
Table processing		PAT, PMT, SDT, PID filtering, Service creation and edition	
Output format		SPTS/MPTS	
OUTPUT			
Number		2 independent	
Number of services		32 (2x16)	
Physical interface		Ethernet 100-BaseT over RJ-45 (IEEE 802.3u)	
TCP/IP Streaming protocol		IP multicast (RTP or UDP)	
Signalling protocols		SAP	
CONTROL INTERFACE			
Number		2 independent	
Physical Standard		Ethernet 100/1000-BaseT over RJ-45	
Protocol		Web Server	

HDMI TO IP STREAMER
HAN series

The HAN 8000 encoder modulates ,the content of 4 HDMI input (MPEG-4 AVC/H.264 HD) signals to a DVB-ASI or IP output.

APPLICATION
It is used to watch the content of several HD digital sources, such as satellite receivers, DVD or Blue-ray players, etc, on a TV equipped with a DTT receiver

FEATURES
- Multiplexer function for 4 HDMI inputs (MPEG-4 AVC/H.264 HD).
- Supports HDCP
- HD resolution up to 1920*1080_60p.
- MPEG-1 Layer 1, Layer 2 audio encoding.
- Programming via front panel (keyboard + LCD display) or PC (local or remote).
- Mountable in 19" rack.
- Includes:
- 1 x BNC-F(m) cable for one COFDM output.
- 1 x user's manual.
- 1 x 230Vac cable.

Includes:
- 1 x BNC-F cable (m), for one of the COFDM outputs.1
- x User's manual.
- 1 x Power cable 230 Vac.

Supply voltage	V	90 ÷ 250
Consumption	W	25
Operating temperature range	ºC	0 ÷ 45

MODEL		HAN 8000
Reference		08205
VIDEO ENCODING		H.264/AVC High Profile Level 4.0 (HD)
Input		HDMI x 4 + ASI
Resolution		1920*1080_60p, 1920*1080_50p; 1920*1080_60i, 1920*1080_50i; 1280*720_60p, 1280*720_50p
AUDIO ENCODING		MPEG1 Layer II
Sample rate	KHz	34/44,1/48
Bit rate	Kbps	128, 160, 192, 224, 256, 320, 384
ASI OUTPUT		DVB-ASI
Connector type		2 x BNC, 75 Ohm
IP OUTPUT		IP/UDP (TS over IP); MOTPS/SPTS/Unicast/Multicast
Connector Type		RJ-45
Output bit rate	Mbps	80 (4:2:0)
Programming		Keyboard + LCD / NMS (Ethernet RJ-45)
Packing dimensions	mm	580 x 580 x 135
Weight	Kg	6.2

ENCODER
ENC-108

Encoder with 8 HDMI inputs to IP. With the ENC-108 you will be able to distribute IP signals from your receivers, cameras, video players, PCs, etc. ....

APPLICATION

• It is a solution for distributing signals from DTT receivers, cameras, DVDs, Blue Ray players, etc...

CHARACTERISTICS

• 1Video encoding in H.264 and audio encoding in MPEG-1 Layer II or AAC.
• Supports all major resolutions from 480i to 1080p60
• Offers 8 IP output addresses in SPTS (unicast or multicast)
• Easy configuration with built-in web user interface
• Desktop or 19" Rack installation

MODEL	ENC-108
Reference	4325
HDMI INPUT	
Input Connector	HDMI X 8
VIDEO	
Encoding	H.264
Input Resolution	See resolcutions table
Bit rate	20~19000Kbps
AUDIO	
Coding	MPEG 1 Layer II, AAC
Sampling rate	32 / 44.1 / 48 KHz
Bit rate	384 Kbps
IP OUTPUT	
Output Connector	1 port of 100/1000 Mbps
Transport Protocol	UDP, RTP
Output transport stream	SPTS
Transmission Mode	UniCast or MultiCast
GENERAL	
Power Consumption	< 7W
Rack space	1U
Dimensions	318 x 260 x 44 mm
Net Weight	3,058Kg
Language	Spanish /English

FAGOR ELECTRÓNICA | **IKUSI**

SET-TOP-BOX for IPTV HD

ICONN

Device enabling reception of digital interactive TV,
IPTV and digital signage media

Supply voltage	V	90 ÷ 250
Consumption	W	25
Operating temperature range	ºC	0 ÷ 45

MODEL	iconn 200
Reference	10001
Processor	Amlogic S912 octa core ARM-A53 CPU up to 2GHz (DVFS)
GPU	ARM Mali-T820MP3 GPU up to 750MHz (DVFS)
Internal flash storage	16GB eMMC
RAM memory	2GB DDR3
RJ45 connector	1000M Ethernet
Wi-Fi	Support 802.11 a/b/g/n/ac Dual Band AC Wi-Fi
Wifi antenna connector	SMA connector + external 3dBi antenna included
USB	3 High Speed 2.0
Video output	1 x HDMI 2.0 up to 4K 1 x RCA
Video decoder	H.264 AVC HP@L5.1 up to 4Kx2K@30fps H.264 MVC up to 1080p@30fps MPEG-4 ASP@L5 up to 1080p@30fps WMV/VC-1 SP/MP/AP up to 1080p@30fps AVS-P16(AVS+) /AVS-P2 JiZhun Profile up to 1080p@30fps MPEG-2 MP/HL up to 1080p@30fps MPEG-1 MP/HL up to 1080p@30fps RealVideo 8/9/10 up to 1080P WebM up to VGA MJPEG up to 1080p@30fps
Protocols	IPTV Multicast (IGMP v2/v3) Video over UDP, RTP and HTTP HTML5 audio and video tags HLS (HTTP Live Streaming) MPEG DASH Video Streaming
Operating system	Android 7.1 Nougat
Operating temperature	0ºC-40ºC
Feeding	5 VDC
Consumption	< 2 A
Network adapter	100-240 VAC 50/60 Hz − 5VDC 2A
External dimensions	166x112x26 mm
Gross Weight	328gr

BYOE – Bring Your Own Entertainment

Guarantee your guests the best streaming connection so they can stream their own content simply and securely.

CAST CONNECT

Cast Connect: Streaming services

CASTCONNECT

Discover Cast Connect, the ultimate solution to enjoy streaming like at home, directly on your hotel room screen!

Our advanced professional casting system, Cast Connect from Fagor, is designed specifically for hotel environments, where guest privacy is a top priority. With this service, favorite series, movies, music, news and sports can be easily shared from a personal device to the in-room TV.

Integration into the hotel's existing WiFi network makes it easy to connect the mobile device to the TV via a simple QR code scan.
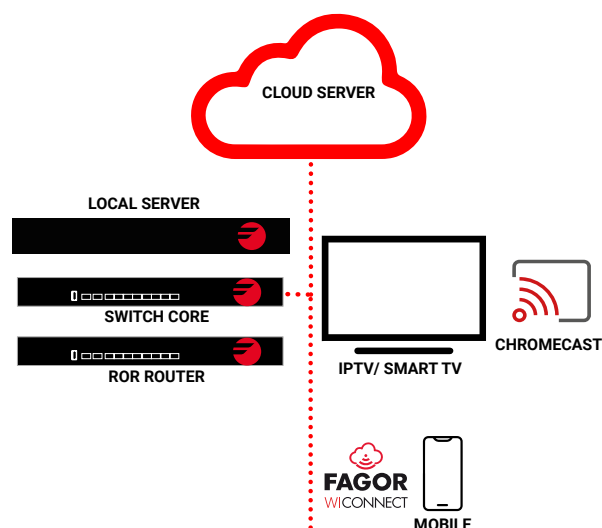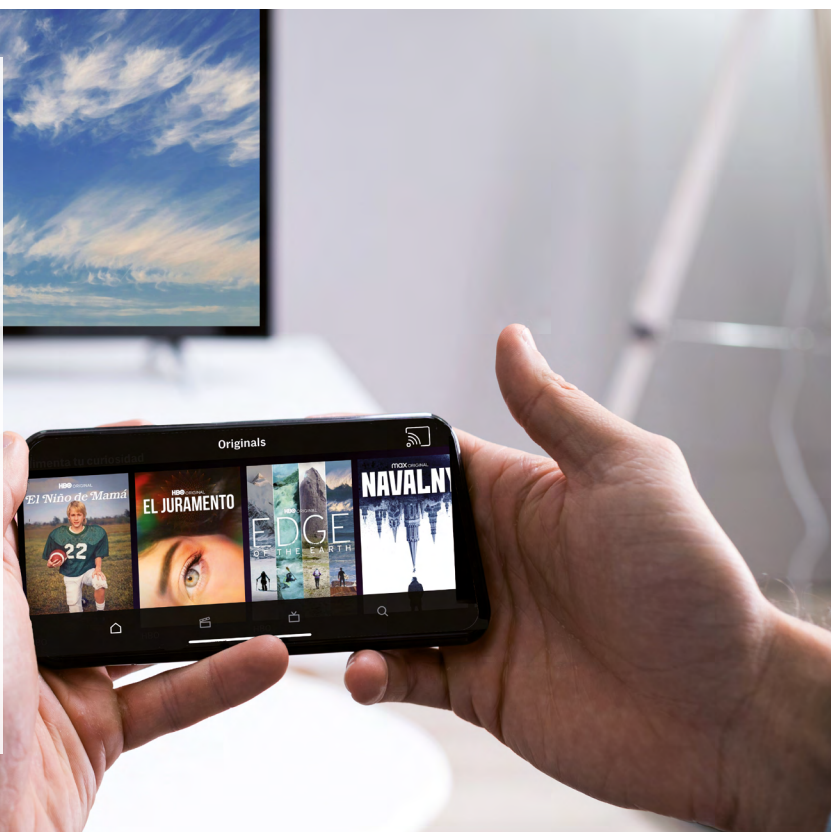
REF.	MOD.	DESCRIPTION
8477	Cast Connect 60	Cast Connect Server up to 60 rooms
8441	Cast Connect 300	Cast Connect Server up to 300 rooms
8478	Cast Connect 2000	Cast Connect Server up to 2000 rooms
8476	Chromecast v4 + config + castlock	Chromecast v4 HD. Includes factory device configuration and castlock.
10033	Chromecast v4 UHD 4K + config + castlock	Chromecast v4 UHD 4K. Includes factory device configuration and castlock.
8490	Cast Connect Server 19" bracket	Support bracket for installation of the Cast Connect 300/2000 server.
10511	ROR 301 R	Router
8456	Cast Connect Protect 1 year	Includes licence, updates and NBD line 2&3 FMS support.

CLOUD SERVER

LOCAL SERVER

SWITCH CORE

ROR ROUTER

IPTV/ SMART TV

CHROMECAST

FAGOR WICONNECT

MOBILE

LG   PHILIPS   SAMSUNG

STREAMING SOLUTION
Cast Connect: Streaming Services

CASTCONNECT

- One-step authentication via QR code.
- Based on Google Chromecast (*).
- Compatible with IOS and Android.
- Carousel of background images.
- Secure guest authentication.
- Isolation of communications between rooms.
- Web interface for management (**).

- Hotel brand customisation.
- Multiple language support.
- Casting device monitoring (**).
- Analysis of the use of Casting services.
- Anti-theft cable option. Single HDMI input requirement for hotel TVs.
- Integration with PMS for Chromecast sessions. Restart after checkout or guest language customisation.(**)
- Possibility to include video of the establishment.

(*) Chromecast is a trademark of Google LLC
(**) Coming soon

The two main components of the solution are:
- **Cast Connect Server.**
- **Casting Device: Chromecast dongle**

CAST CONNECT SERVER

REF. 8477
REF. 8441
REF. 8478

Cast Connect components

VLAN NET ► ◄ VLAN X NET

Car Connect server

Guest network

Wired network or wifi SSID hidden
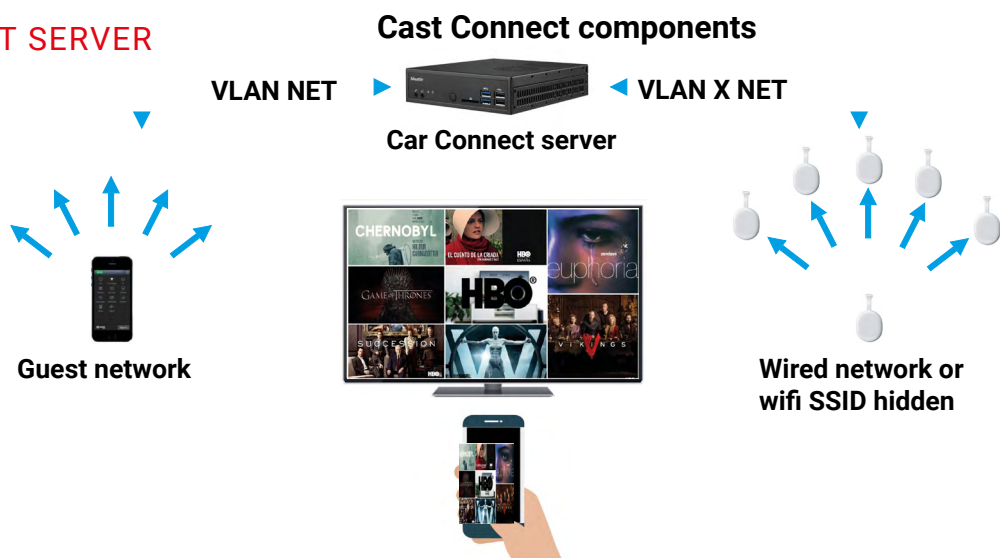
CHROMECAST WITH GOOGLE TV
HD series

Streaming entertainment, on your TV

- Voice Search
- Watch movies, series and Netflix in 4K with HDR

MODEL	Chromecast Serie 4K UHD	Chromecast Serie HD
CPU	AmlogicS905D3 (1.9GHz quad-core ARM Cortex-A55) andMali-G31 MP2 GPU	Amlogic S805X2 (quad-core ARMCortex-A35)
Memory	2GB DDR3L	1.5GB DDR3L
Capacity	8GB	
Display	Up to 4K UHD a 60 fps	Up to 1080p HDR a 60 fps
Conectivity	Wi-Fi 5 (5GHz)	
	Wi-Fi 4 (2.4GHz)	
	Bluetooth4.2	
	Ethernet	
	(via adapter)	
Operating system	Android TV	
Streaming support	all services	
Power	USB-C (requires power adaptor)	
Dimensions	16.2×.61 ×1.25cm	

Connectivity and networking

Offer your users easy and secure connectivity that works as they expect and demand.

WIFI - WICONNECT
GPON
IP- ETHERNET

FAGOR ELECTRÓNICA | IKUSI

WIFI SERVICE
WiConnect

WICONNECT

HIGH CONNECTIVITY AND SECURE COVERAGE
Fagor presents a set of solutions designed to achieve efficient, secure and responsible Internet access in a high capacity multiservice network infrastructure, using coaxial cable, Ethernet cable and fibre optics.

Through the device, the guest accesses the wifi network via the WICONNECT connection, without contacting the reception desk.

Professional management of guest wifi access, including:
Customisable captive portal, disclaimer with terms of service use.
Definition of different profiles and allocations of bandwidth, user/password, RRSS, email…

CLOUD SERVER

FAGOR WICONNECT
APP

MOBILE   LAPTOP   TABLET
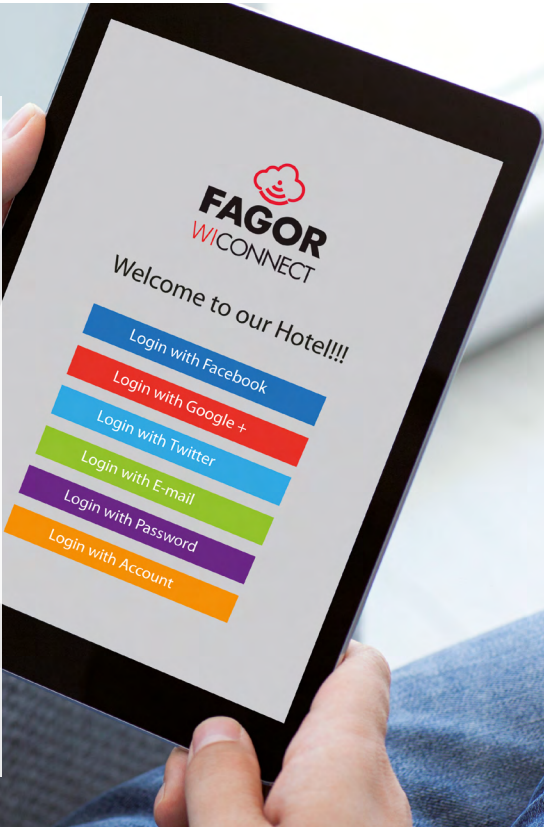
REF.	MOD.	DESCRIPTION
SOFTWARE		
10210	CSU 001	Cloud Connect Server
10350	FMO-050	WiConnect (hotspot)
HARDWARE		
10511	ROR 301 -UI	ROUTER

CONNECTIVITY
GPON TECHNOLOGY

GPON (Gigabit Passive Optical Network) is a telecommunications access technology that uses fibre optic cabling to reach the end user.

What is Gpon?

- This access technology uses an OLT (Optical Line Termination) from which the optical fibres are routed to the ONTs (Optical Network Termination), end-user equipment that converts the optical signals coming through the fibre into electrical signals. The OLT is the element in charge of traffic propagation, bandwidth allocation... among other functions and the ONT is the equipment in charge of delivering the services to the end user.
- Thanks to this access technology we can reach the end user FTTx (Fiber To The x). Depending on who the end user is, there will be a different topology: FTTR (Fiber To The Room), FTTO (Fiber To The Office)...

What does it allow you to do?

1. It allows you to carry multiple IP services over the fibre; VoIP, IPTV, internet...

2. High data transmission capacity, 2.5 Gbps downstream and 1.25 Gbps upstream.

3. Enables better bandwidth management based on DBA.

4. Enables long distances to be reached

5. Scalable

6. Ideal scenario for Hospitality environments such as Holteles, Residences, Hospitals etc.

CONECTIVITY
GPON TECHNOLOGY

- IKUSI's GPON OLTs are specially adapted to their application in hospitality: hotels, hospitals, singular buildings, ... They are fully compatible with the ITU-T G.984X standard, resulting in an open platform, ready for all types of IP services: Data, VoIP, IPTV,..., or digital TV multiplexing with IKUSI's RF overlay equipment.

- Mechanically it is 1U high, and can be mounted in a 19" rack.

- Redundant power supply.

- Downlink: 8 GPON ports to be used with SFP C+ (SFP-125 ADAT. SFP GPON OLT C+: cod. 8325) or SFP B+ adapter. They are capable of supporting up to 8x128=1024 (OLT-008) ONUs, with a maximum optical split ratio of 1:128. Each GPON port, has a bitrate of 2.488 Gbps upstream and 1.244 Gbps downstream.

- Uplink: 4GE + 4GE (SFP) + 2 X 10GE (SFP+).

GPON
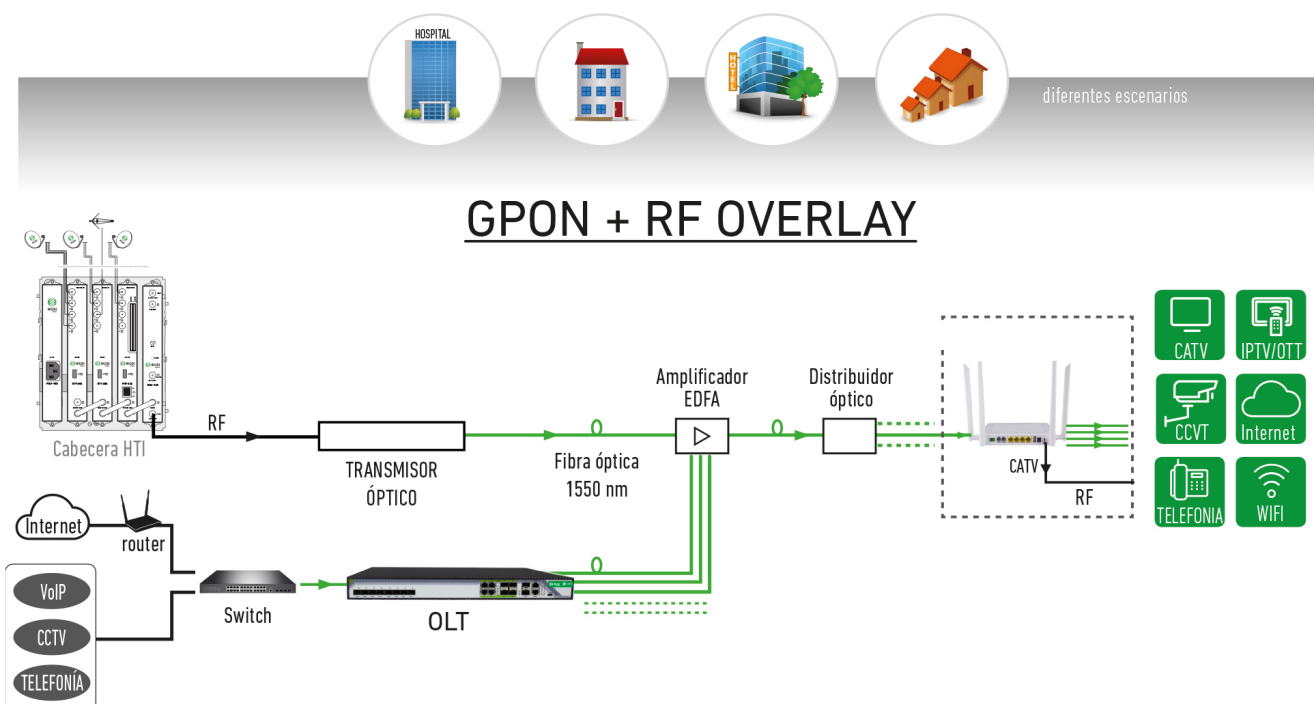
GPON + RF OVERLAY

TYPICAL SCHEME
GPON + RF Overlay

INTERNET

RED
IP

ROT 506

OLT 880

OYA 819

FOSR

1490 nm
1550 nm

1310 nm

ONT

DISPOSITIVOS
MÓVILES

PC

TELÉFONO

TV

www.fagorelectronica.com

FAGOR ELECTRÓNICA | IKUSI
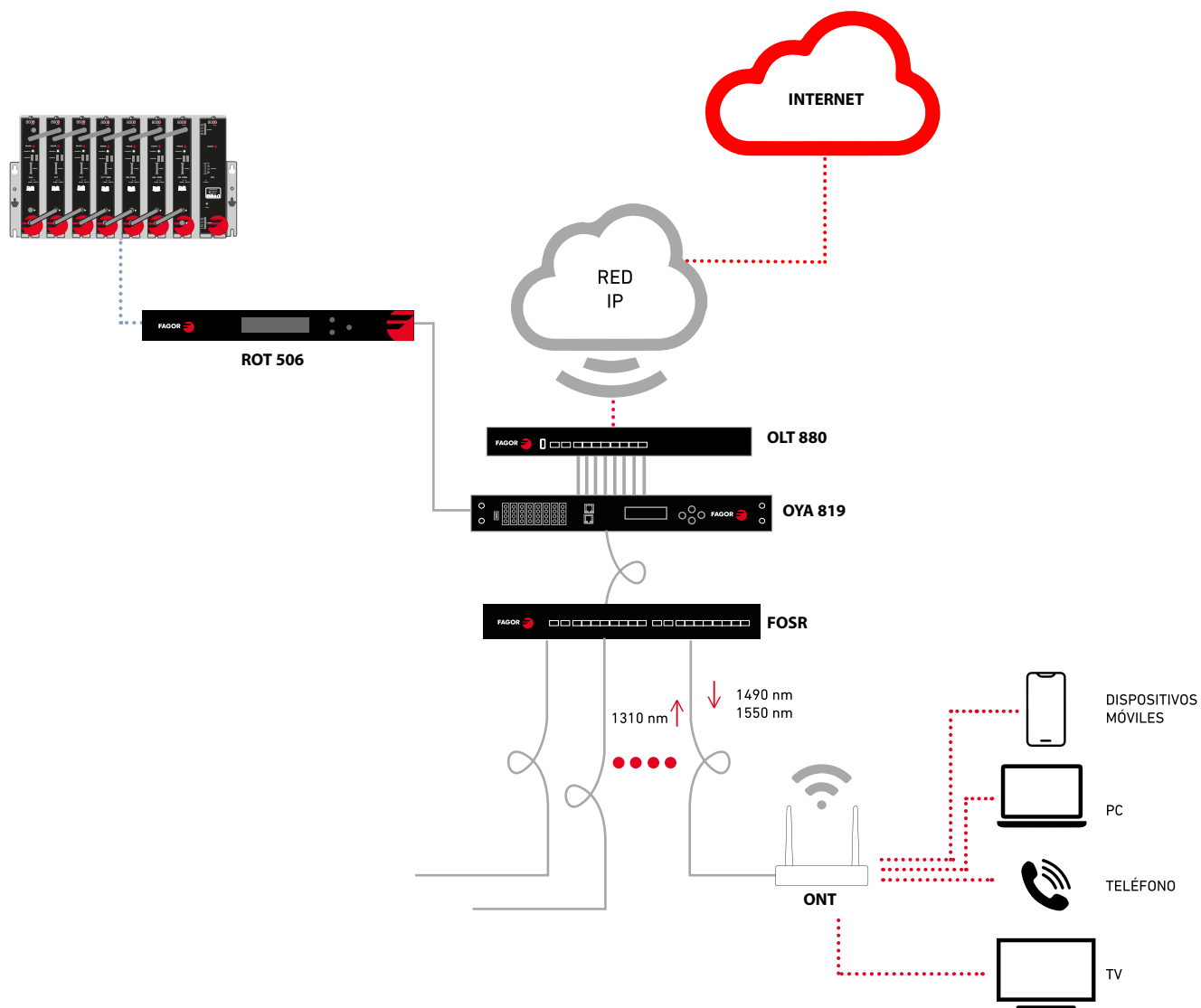
OLT/GPON
OLT 008

The OLT (Optical Line Terminal) is a device that integrates layer 2/3 functions, and controls both directions of communication (downlink and uplink), with 20 km being the maximum distance allowed for the transmission of information.

It can transmit multiple IP services: IPTV, Internet, telephony, CCTV... among others. It also facilitates the management of the optical network.

8 PON

1 GE (RJ45)

1 GE (SFP)

AUX

10 GE (SFP+)

LED estado
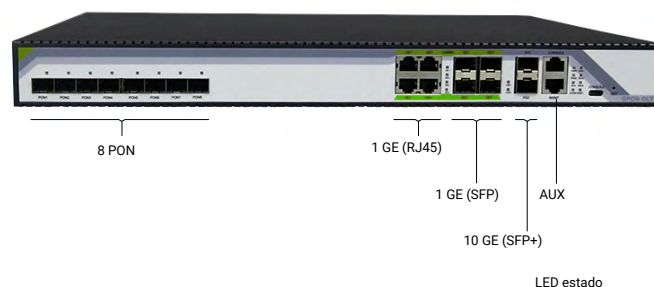
GENERAL FEATURES
- 1U - 19 inch
- Redundant Power Supply - Power Consumption < 70 watt
- Power supply
- DC -36V ~ -72V
- AC 90V ~ 240V 47/63Hz
- Dimensions 440 x 391 x 44 mm (L x W x H)
- Weight 4 kg
- Operating temperature 0°C to 50°C
- Ambient humidity 5% to 90% (non-condensing)

MODEL	OLT-008
Reference	8302
Downlink PON	8
Uplink Ethernet 10/100/1000 Mbps	4
SFP	4
SFP+	2
Management	1
Console 1	1
USB	1

GPON FEATURES
- ITU-T G.984.x and ITU-T G.988 compliant - 20 km transmission distance
- Transmission distance of 20 km - Up to 128 ONTs per PON port
- Up to 128 ONTs per PON port - SC/UPC connectors - Supports Class B+ - Sensitivity -28 dBm
- SC/UPC connectors
- Supports Class B+ - Sensitivity -28 dBm - Saturation -8 dBm
- Supports Class c+ - Sensitivity -30 dBm - Saturation -12 dBm

Ethernet Features
- Auto-negotiation
- Full/half duplex mode
- 4 x 10/100/1000 Mbps RJ45 ports

FEATURES
Network Management
- CLI, Web, Telnet, SSH, SNMP, and EMS
GPON
- Supports dynamic bandwidth allocation
- AES encryption
- Flow control
- Auto discovery

- Supports multiple authentication systems
- ONT management

Layer 2:
- Supports 4094 VLANs
- VLAN tag/untag
- Trunk/access/hybrid port
- Supports "VLAN translating" and "VLAN stacking: QinQ".
- Port isolation
- Port mirroring
- Spanning-tree
- RSTP
- Access Control List
- QoS
- Port, VID, TOS and MAC address level management

- Flow control
- Multicast
- IGMP snooping/proxy
- Multicast group support

Layer 3: - DHCP-relay and DHCP-snooping
 DHCP-relay and DHCP-snooping
- Supports "vlanif
- Support link-aggregation

FAGOR ELECTRÓNICA | IKUSI

OPTICAL LINE TERMINATION FOR GPON NETWORKS
OLT series

Headend equipment for GPON networks. Intuitive Web-based configuration without the need for external systems. 8 GPON downlink ports.

FEATURES

- 6 GE SFP ports. 2 10GE SFP+ ports. 8 GE RJ45 uplink ports.
- ITU-T G.984.x and G.988 compliant.
- Remote management via SNMP/WEB/EMS.
- Speed per PON port: downstream 2.5Gbps. upstream 1.25 Gbps.
- Supports ONT auto-discovery and remote software upgrade via OMCI.
- Dual hot-swappable power supply.
- 1U 19" rack.
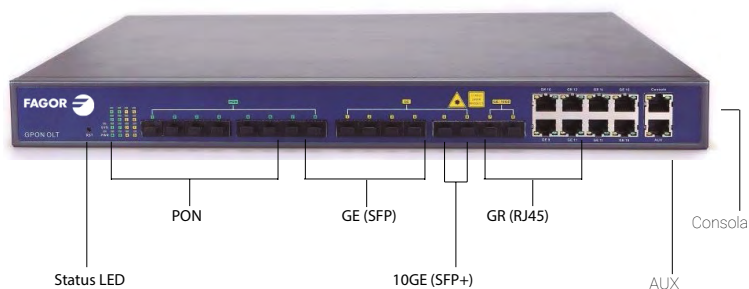
MODEL		OLT 880
Reference		10421
INPUT		
Uplink Interfaces		2 puertos 10GE (SFP+) 6 puertos 1GE SFP 8 puertos 1GE RJ45
Management Interfaces		1 RJ45 FE AUX 1RJ45 consola
CATV input power	dBm	-5 a 10
OUTPUT		
No. of GPON ports		8 puertos SFP
No. of splitting per port		1:128
Downstream bitrate per PON	Gbps	2,488
Upstream bitrate per PON	Gbps	1,244
GPON standard		ITU-T G.984.X/G-988
Transmission distance	km	20
Wavelengths	nm	TX 1490 / RX 1310
SFP connectors		SC/UPC
Fiber type		9/125um SM
No. of VLANs		4096
VLAN management		port VLAN, tag/untag, transparent transmission, VLAN translation, QinQ
Multicast		256 grupos IP, IGMP snooping
DHCP		server, relay, snooping
QoS		por puerto, VID, TOS y MAC
Management interface		Web/Telnet/CLI/EMS
Management port		Ethernet RJ45
Status LED		IN/OUT/POWER
Mounting		19" rack 1U
Power supply (redundant)	Vac	100 ÷ 240, 50-60Hz
Consumption	W	45
Operating temperature	ºC	0 ÷ 50
Storage temperature	ºC	-40 ÷ 85
Storage humidity	%	5 ÷ 90
Dimensions	mm	422 × 200 × 44

ONT
ONT 524

High performance to guarantee an excellent experience with video services, VoIP, Internet... It integrates wireless functions to provide users with greater efficiency and security in data transmission, in addition to having a wide range of coverage and penetration.

ONT-524

ANTENAS WiFi

PON POTS LAN ON/ DC

GENERAL CHARACTERISTICS
- Power consumption < 13w
- Power supply DC 12V/1'5A - Power supply DC 12V/1'5A
- Dimensions 240 x 240 x 24 mm (L x W x H x D)
- Weight 317 g
- Operating temperature 0-40°C
- Ambient humidity 10% to 90% (non-condensing)

GPON features
- Compliant with ITU-T standard G.984.1/2/3/4
- Gemport encapsulation
- SC/APC connector
- Class B+
- Sensitivity -28 dBm
- Saturation -8 dBm
- FEC
- Supports AES encryption
- Supports dynamic bandwidth allocation
- Supports auto-discoveryLayer 2 and 3 functions
- VLAN tag/untag support
- DHCP client and server
- PPPoE client
- Static IP support
- Port binding support
- Multicast snooping/proxy support

MODEL	ONT-524
Reference	8302
Ethernet ports	4
POT ports	2
CATV ports	x
WiFi	sí
USB	sí

Telephony features
- SIP/H248
- Codec compatible G711U/G711A/G729/G722
- Supported Fax Codec T38/G.711
- 2 RJ11 ports
- Jitter buffer
- Echo cancellation
- Call waiting and caller ID
- Ring balance

WiFi Features
- IEEE802.11b/g/n/ac Standard
- Frequency range: 2'4 GHz and 5 GHz
- 2x2 MIMO
- 4 external 5 dBi antennas
- Multiple SSIDs
- WEP/WAP/WAP2 protection
- IEEE802.1x standard USB features
- 2.0 interfaceNetwork management
- Web
- Telnet
- TR069
- OMCI
- Missing ONT Alarm (Dying Gasp)
- Loop Detection Alarm
- Incident Alarm (Rogue)

OPTICAL NETWORK UNIT FOR GPON NETWORKS

ONT 825 PoE

GPON optical network terminal

FEATURES

- 8 10/100/1000BASE-T Ethernet ports with 48 V PoE.
- 1- and 2-band Wi-Fi with transfer rates from 300 to 1200 Mbps
- ITU-T G.984.x standard compliant
- Compatible with Triple play services: Internet, VoIP and IPTV
- Maximum speed: downstream 2.5Gbps, upstream 1.25 Gbps
- Management via OMCI, Web, SSH, TR069.

MODEL		ONT 825 PoE
Reference		10435
GPON standard		ITU-T G.984.X (G.984.5 WBF)
Class		B+
Wavelengths	nm	Downlink 1490 / Uplink 1310
SFP connectors		SC/UPC
Authentication		SN or password according to G.984.3
Other		Flexible mapping between GEM port and TCONT
Ethernet ports		8GE RJ45 RJ45 POE (Max 30W/port) IEEE802.3at/af
Router functionality		Bridging & Switching (802.1d / 802.1q). 8 traffic priorities (802.1p). VLAN filtering. IGMP multicast for IPTV

WIFI SPECIFICATION		
Standard		IIEEE 802.11 b/g/n/ac
(2.4/5G) 2X2 MIMO		300Mbps (2.4G), 867Mbps (5G)
Bandwidth		300Mbps (2.4G), 867Mbps (5G)
Antenna		4x2dBi
Other		4+4 SSID
Management interface		Web/OMCI/TR069
Status LEDs		POWER/PON/LOS/WLAN
Assembly		Wall-mounted and table-top (weatherproof enclosure optional)
Power supply (redundant)	V	48Vdc, 2.5A
Consumption	W	<120W
Operating temperature	°C	-30 ÷ 55
Storage temperature	°C	-30 ÷ 60
Storage humidity	%	10 ÷ 90
Dimensions	mm	196 x 160 x 32
Weight	Kg	0,32

OPTICAL NETWORK UNIT FOR GPON NETWORKS
ONT 115, 412 C & 425

GPON optical network terminal.

FEATURES

- Several 10/100/1000BASE-T Ethernet ports.
- 1- and 2-band Wi-Fi with transfer rates from 300 to 1200 Mbps.
- POTS port for telephony.
- Compatible with ITU-T G.984.x standard.
- Compatible with Triple play services: Internet. VoIP and IPTV.
- Maximum speed: downstream 2.5Gbps. upstream 1.25 Gbps.
- Management via OMCI. Web. SSH. TR069.

MODEL		ONT 115	ONT 412 C	ONT 425
Reference		10433	10431	10434
GPON Standard		ITU-T G.984.X (G.984.5 WBF)		
Class		B+		
Wavelengths	nm	Downlink 1490 / Uplink 1310		
SFP Connectors		SC/UPC	SC/APC	SC/UPC
Authentication		SN o contraseña según G.984.3		
Other		Mapeo flexible entre GEM port y TCONT		
Ethernet ports		4GE RJ45		
Router functionality		Bridging & Switching (802.1d / 802.1q) 8 prioridades de tráfico (802.1p). Filtrado de VLANs. IGMP multicast para IPTV		
CATV				
Bandwidth		---	47-1000MHz	---
Impedance		---	75	---
TELEPHONY POTS		82dBμV con CAG (+2~ -10dBm)		
REN				
Connectors		2 RJ11	1 RJ11	
Ring tones		DTMF		
Protocols		G.711A/μ, G.729a/b, and G.722, T.30/T.38/G.711 fax mode, SIP		
WIFI SPECIFICATION				
Standard		IEEE 802.11 /b/g/n (2.4) 2x2 MIMO	IEEE 802.11 b/g/n/ac (2.4/5G) 2x2 MIMO	IEEE 802.11 a/b/g/n/ac/ax (2.4/5G/WIFI6) MU-MIMO
Bandwidth		300Mbps	300Mbps (2.4G), 867Mbps (5G)	300Mbps (2.4G), 867Mbps (5G), 574+1201Mbps (WIFI6)
Antenna		2x5dBi	4x5dBi	4x5dBi
Others		4 SSID	4-4 SSID	4+4 SSID
Management interface		Web/OMCI/TR069		
Status LED		POWER/PON/LOS/LAN/TEL/USB/WLAN/WPS		
Mounting		Pared y sobremesa		
Power supply (redundant)	V	12Vdc, 1.5A (adaptador AC incluido)		
Consumption	W	<10	<12	<18
Operating temperature	ºC	0 ÷ 50		
Storage temperature	ºC	-30 ÷ 70		
Storage humidity	%	5 ÷ 95		
Dimensions	mm	205 x 140 x 37	173 x 120 x 30	205 x 140 x 37
Weight	Kg	0,34	0,42	0,34

OPTICAL TRANSMITTER

ROT series

1550 nm optical transmitter for use in FTTH. FTTx PON. Triple-play and RF Overlay.

APPLICATION

- Conversion of RF signals into amplitude-modulated optical signals for CATV HFC networks.

FEATURES

- Equipped with DFB laser. for very good linearity and high optical output power.
- Advanced multi-frequency RF predistortion technology ensures perfect CTB and CSO performance at high standard CNR value.
- Automatic gain control (AGC) enables stable output at different RF input levels.
- Different networks can be optimized by OMI adjustment.
- Automatic temperature control, which ensures a long service life of the device.

- Built-in dual backup power supply.
- Configuration of system parameters controlled by the front panel keypad or by the user-friendly web interface.
- A standard RJ45 interface is provided. which supports SNMP and WEB remote network management.

MODEL		ROT 506
Reference		10400
OPTICAL PARAMETERS		
Output power	dBm	6
Output wavelength	nm	1550
Laser linewidth		0,65
SMSR	dB	≥45
XP	dB	≥20
RIN	dB/Hz	≤-160
Optical return loss	dB	≥50
Fiber connector		SC/APC
RF PARAMETER		
Frequency Range	MHz	47-862
Input level	dBµV	70...100
Flatness	dB	±0,75
CNR	dB	≥51
CTB	dB	≥65
CSO	dB	≥60
Return loss	dB	≥16
Input impedance	Ω	75
RF connector		F-hembra
OTHER PARAMETERS		
Network management interface		SNMP y WEB
Power supply	V	90 ÷ 265
Power consumption	W	≤30
Operating temperature	ºC	-5 ÷ 55
Storage temperature	ºC	-40 ÷ 85
Operating relative humidity	%	5 ÷ 95
Dimension	mm	370 × 483 × 44

OPTICAL YEDFA AMPLIFIER

OYA series

Optical amplifier in rack format, compatible with EPON/GPON systems.

APPLICATION

- Suitable for fiber optic signal distribution.

FEATURES

- 8 WDM (RF Overlay+GPON) output ports.
- Output power 8*19dBm.
- Adjustable output power from -3 to 0 dB.
- Wide input range from -5 to 10 dBm.
- Very low noise figure.
- Input/output/status/power status indicator LEDs.
- Laser Bias input level and current monitoring and alarms.
- Dual hot-swappable power supply.
- Control and monitoring via WEB/SNMP.
- 1U 19" rack.

MODEL		OYA 819
Part number		10412
No. of ports OLT		8
INPUT		
CATV Wavelength	nm	1540-1560
OLT Wavelength	nm	1310/1490
CATV input power	dBm	-5 a 10
OUTPUT		
Output power	dBm	8*19
Output power regulation	dB	-3 a 0
Power stability per port	dB	0,1
Noise figure (@6dBm Input)	dB	4 (max. 5,8)
INPUT-OUTPUT		
Return loss	dB	55
IN-OUT isolation	dB	30
OLT optical connectors		SC/UPC
CATV+OUT optical connectors		SC/APC
OTHER PARAMETERS		
Management interface		SNMP/WEB
Management port		Ethernet RJ45
Display and buttons		LCD/4
Status LED		IN/OUT/POWER
Mounting		19" rack 1U
Power supply (redundant)	V	90 ÷ 265
Consumption	W	≤50
Operating temperature	ºC	-5 ÷ 50
Storage temperature	ºC	-20 ÷ 85
Storage humidity	%	5 ÷ 95
Dimension	mm	483 ×422 × 44
Weight	Kg	11,5

SWITCH ETHERNET 26 PORTS

ECS 226

Intelligent switch with 24 Fast Ethernet ports plus 2 Gigabit Ethernet (GbE) uplinks.

APPLICATION
Suitable for IPTV signal distribution.

FEATURES
- Web-based user interface
- Download and copy configuration between switches
- Multicast IGMP Querier, snooping
- Reset button

MODEL		ECS 226
Reefrence		10501
Interfaces		"24xGbE+ 2xGbE/SFP Combo Uplink"
Capacity Switching	Gpbs	52
Baud rate	Mpps	38,69
MAC Addresses		8192
Concurrent VLANs		256
Power Supply	V~,Hz	100-240, 50-60
	W	18
Operating temperature	ºC	0-50
Dimensions	mm	440x201x44
Weight	Kg	2.81

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Switch 24 GE + 4 x 10G SFP+ L2/L3 POE
SWI024G

The SWI024G is an L2/L3 manageable switch equipped with 24 Gigabit RJ45 ports and 4 10G SFP+ slots.
All RJ45 ports support the 802.3 af/at (PoE+) standard and provide a total PoE power of 380W.
Multiple L3 compatible management functions are available.
The SWI024G is capable of delivering high performance even in the most demanding installations, while in smaller networks it can act as a backbone for Gigabit switches and high-speed servers.4 SFP+ slots provide greater network flexibility.

The SWI024G is designed exclusively for the networking needs of growing installations, with a comprehensive set of management and security features.

APPLICATION
This product is suitable for small and medium-sized installations and offers ideal solutions for a wide variety of network scenarios.

CHARACTERISTICS
- 4 SFP+ 10 Gbps slots
- 24 RJ45 10/100/1000Mbps ports. POE 802.3 af/at-Management and administration via WEB, CLI, TELNET, SNMP
- Supports IEEE 802.1Q VLAN, QoS, ACL, SSL
- Supports Spanning Tree, Multicast IPV6, SNMP
- Supports 802.1X certification-
 Supports ERPS ring network
- Supports RSTP/MSTP spanning tree
- Supports RSTP/MSTP.
- Support Port Security, Port Monitoring and Port Isolation
- Support AI smart POE, auto detect PD devices, support PoE Watchdog
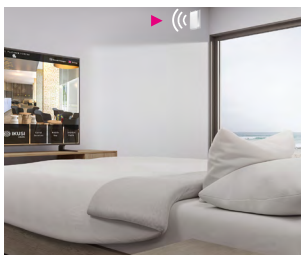- Support Quaternary binding, ARP/IP/DoS protection -

Mechanical Rack 19" 1U
- Support IEEE 802. 3i, 802.3u, 802.3ab, 802.3z, 802.3x , 802.3 az, 802.3at, 802.3af.- 24 802.3 af/at compliant POE ports, per port up to 30W, and 380W total PoE power.
- Features self-learning and self-aging of MAC addresses.
- Operates in store and forward mode
- LED indicators for power, link/activity monitoring
- Supports QoS, port mirroring and link aggregation protocol
- Designed in a 19-inch metal enclosure, with internal power supply. Suitable for rackmount installation.
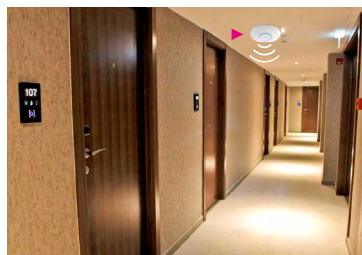
FAGOR ELECTRÓNICA | IKUSI
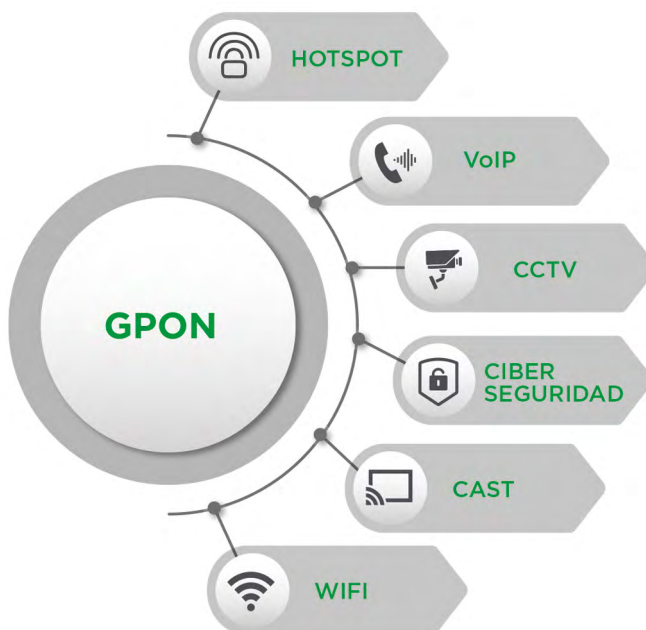
GPON SERVICIES

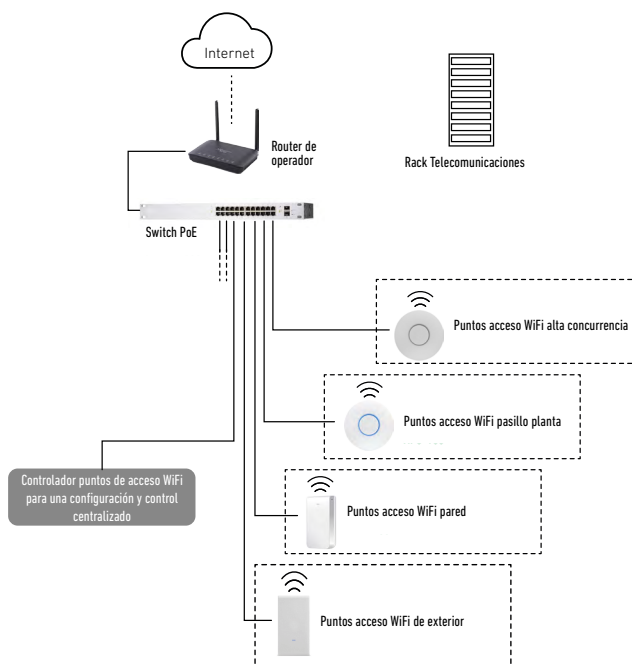WIFI, VoIP, Hotspot, CYBERSECURITY, CCTV

Room WIFI, IPTV, VoIP,

Common indoor areas WIFI, CCTV,…

Common outdoor areas WIFI, CCTV,…

GPON

- HOTSPOT
- VoIP
- CCTV
- CIBER SEGURIDAD
- CAST
- WIFI

WIFI/GPON

Internet

Router de operador

Rack Telecomunicaciones

Switch PoE

Puntos acceso WiFi alta concurrencia

Puntos acceso WiFi pasillo planta

Controlador puntos de acceso WiFi para una configuración y control centralizado

Puntos acceso WiFi pared

Puntos acceso WiFi de exterior

Other solutions

Seamless Experiences, Advanced Technology: Redefining Business Management and User Experience

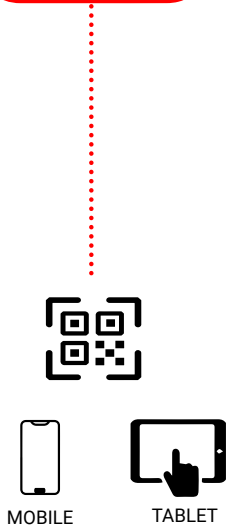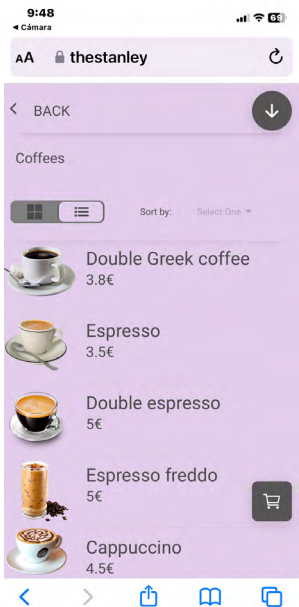**DYNAMIC QR**
SMART QUEUE MANAGEMENT

FAGOR ELECTRÓNICA | IKUSI

ADDONS SERVICES
Dynamic QR

QR DINÁMICO

At any point you have chosen to place QR codes, a visitor can simply, with their mobile camera, 'read' where the queue is progressing and receive a notification when their number comes up for service, bar orders, promotions, etc…

CLOUD CONNECT

MOBILE   TABLET

REF.	MOD.	DESCRIPTION
SOFTWARE		
10210	CSU 001	Cloud Connect Server
10310	FMO-020	QR dynamic code

9:48
◂ Cámara
AA 🔒 thestanley ↻

‹ BACK ↓

Coffees

Sort by: Select One ▾

Double Greek coffee
3.8€

Espresso
3.5€

Double espresso
5€

Espresso freddo
5€

Cappuccino
4.5€

www.fagorelectronica.com

ADDONS SERVICES
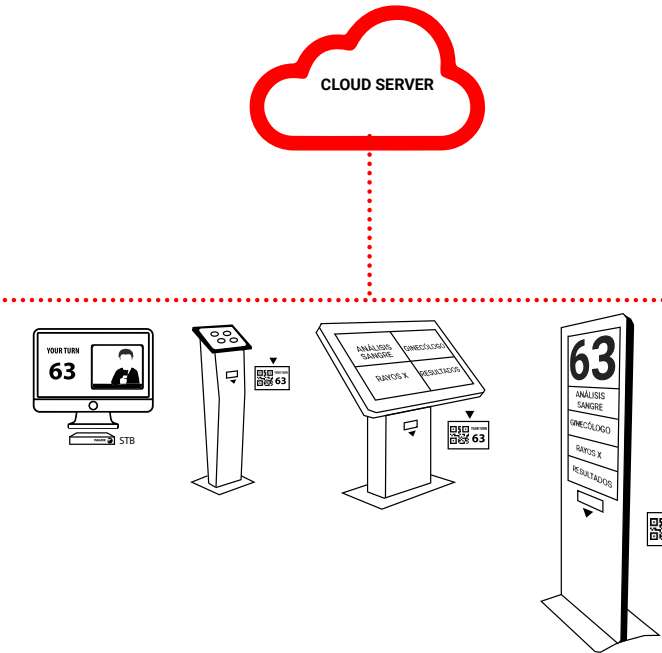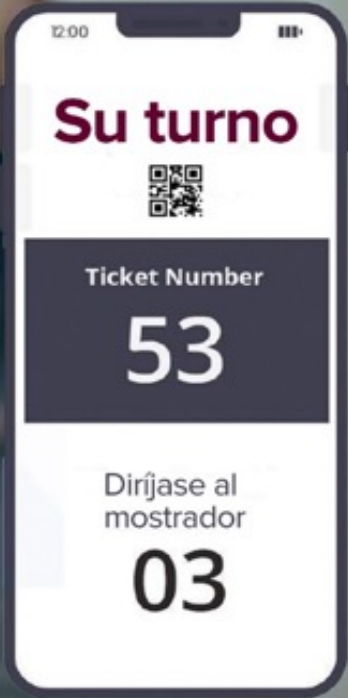# Intelligent queue management

SMART PASS

INTELLIGENT QUEUE MANAGEMENT
The user scans the code to avoid queuing, which has several advantages
• Controlled access
• Visual notification by traffic light
• Contactless or printed banknotes
• Constant updating throughout the area
• Multiple use of monitors/totems for informational or advertising purposes

Compatible with any TV, without the need to change the existing equipment. Possibility of special installations for kiosks, stands, videowalls…

Su turno

Ticket Number

53

Diríjase al
mostrador

03

CLOUD SERVER

REF.	MOD.	DESCRIPTION
SOFTWARE		
10210	CSU 001	Cloud Connect Server (in the cloud)
10321	FMO-31	Intelligent queue managemet
10322	FMO-32	Additional queue
10323	FMO-33	Additional user
HARDWARE		
10002	ICONN 200S	Set-top-box Connet for digital signage

Customer success

Your satisfaction, our mission: support and
professional services tailored to your needs.

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Customer Success

Support
At Fagor Multimedia Solutions, we pride ourselves on providing exceptional support services that ensure customer satisfaction with every interaction.
We collaborate closely with our customers and integrator partners to optimize the value chain and provide efficient and customized solutions.

We highly value the collaboration with our certified partners through our Partner Program, who play a crucial role in delivering high-quality support and customer satisfaction.

To ensure the best support service across all lines (1, 2 and 3), we work closely with our integration channel, certified partners and Fagor Multimedia Solutions' R&D and technical support team. We are committed to providing exceptional support to cover all your needs, backed up by service level agreements that guarantee

fast and effective responses to any eventuality. Our goal is to ensure that your support requirements are met in a timely and professional manner.

Your success is our top priority.
This commitment to service excellence is reflected in every aspect of our work. We are here to ensure that your experience with our solutions and services is flawless, giving you the peace of mind and confidence you need to achieve your goals.

Professional Services
At Fagor Multimedia Solutions, we offer not only exceptional products, but also a full range of professional services designed to add value to your projects and optimize your operations.
Our professional services are based on three fundamental pillars:

01 Solution Architecture and Technical Consulting
Our team of solution architecture and technical consulting experts is dedicated to helping you design and implement customized technology solutions that are perfectly suited to your specific needs.

02 Implementation and Go Live Services
Our implementation and go-live services are designed to ensure a smooth and seamless transition to your new technology solutions. We manage the entire value chain, from physical installation to configuration and integration with your existing systems.

03 Training and Business Continuity
We offer a wide variety of training programs designed to train your staff in the effective use of our technology solutions. Our goal is to provide the necessary skills and knowledge to both the end user and the integration channel to ensure the long-term success of the technology investment.

Contact us ✉ ☎ www