INFO Televes ®

Televes filters will allow 4G deployment to be performed without affecting Digital Television

Once finished the release of the digital dividend, mobile operators have started to make use of the 800MHz band for 4G/LTE, formerly used to broadcast Digital Terrestrial Television. It's well known that in areas close to mobile radio stations, TV reception can be affected by this newly 4G signals. In order to avoid any issues related to the cohabitation of these two networks, the Spanish Ministry of Industry has enforced mobile operators to conduct any necessary effort, either preventive or palliative: "Llega800" is the managing office created to inform, channelize and sort out any end user claim. The experience says that the most common interference scenario can be fixed by adding an effective filter to filter 4G/LTE signals out, and Televes has been chosen as one of these filters suppliers.

Televes already has experience in this field since it is one of the LTE filter suppliers in the United Kingdom back in 2013. Besides, Televes has an extensive antiLTE filter portfolio to pick the most convenient and so guarantee a perfect TV reception. Filter quality and professional work will be the key elements to provide a stable, reliable solution, protected against any environmental conditions ■

INSTALLERS WILL HAVE A WIDE OFFER OF PRODUCTS TO CHOOSE THE BEST DEVICE FOR ANY SCENARIO

AND ALSO...

Is it necessary to certify a Fibre Optics fusion splicer?

MyNET WiFi: one network for clients and another one for the hotel

INFO Televes also available in: French, German, Italian, Polish, Portuguese and Spanish.

SUMMARY

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DID YOU KNOW...
...Televes is one of the Leading Brands of Spain?

TECHNOLOGICAL TRENDS
TV through GPON networks.

NEW PRODUCT
CoaxData, the only one with MyNET WiFi technology.

televes@televes.com
televes.com

MEETING POINTS

Visit us at:

OCTOBER			
8-9	**SATKRAK**	Krakow	Poland
13-16	**CABLE-TEC**	New Orleans	USA
15	**EEBC**	Kiev	Ukraine

Televes

IN THE WORLD

ACIEM
(Bogotá-Colombia) 25 August

*Televes presented its product range certified for the colombian market, focused to offer solutions for telecommunication infrastructures in buildings, DWU, operators and **hospitality**. The highlighted products were the T0X range, with DVB-T **encoders** with 6MHz bandwidth and the complete fibre optics product range. GPON for residential buildings and IPTV for hospitality were particularly eye-catching.*

Efforts from local technical stuff and the offer of high standard technical solutions adapted to the colombian market were highly valued by the attendees and ACIEM.

The Hotel Show
(Dubai-EAU) 28-30 September

*Massive public attendance to our Televes stand, specially dedicated to an **stratetig sector in the United Arab Emirates** hence to our subsidiary in Dubai.*

*This event has been of great help to improve our **positioning as manufacturer of reference** on coaxial solutions, PTV and Digital Signage, showing both operators and hospitality the full potential of our new products that keep catching attention of customers.*

*The worldwide launch of the **Nemesis Set Top Box,** fully in-house designed and manufactured focused on the hospitality sector has been a massive success due to its WiFi hotspot, energy efficiency and versatilify of use* ■

FAQs

Can I check an installation remotely?

Yes, with the new features of the H30 meter that allow a remote monitoring.

THE EXPERT SAYS

Signal issues on a network can only be detected by using a meter connected to it. This detection can be done remotely making use of an internet connection.

You can use your H30 LAN connection to send data to check the installation from any point, just using an internet connection. To do so, the IP address of the device needs to be configured to operate as a public IP address and the port forwarding feature needs to be configured as well. H30 features a web based tool to configure all these settings, that, apart from the HTML5 interface, iOs and Android apps are also available on Apple Store and Google Play

This is widely used in regional headends in the United States, as having a meter there is oftenly more costeffective than sending an engineer onsite ■

ALWAYS AT THE LAST   *DigiNova becomes DiNova*

After the initial success achieved as the DTT aerial with the lowest visual impact, Digi-Nova changes its name in preparation for **international expansion** to markets where DTT reception can be compatible with an antenna designed to integrate with its environment.

DiNova **includes BOSS Tech**, which to automatically adapts the level of the DTT output signal to its best-performance parameters.

Besides offering a **vanguard design**, Dinova antenna stands the test of time and harsh weather elements, as it is protected with a robust and sealed ABS cover.

Due to its **design, technology and resistance**, the antenna DiNova is ideal for installations in building facades, balconies, or single dwelling units ■
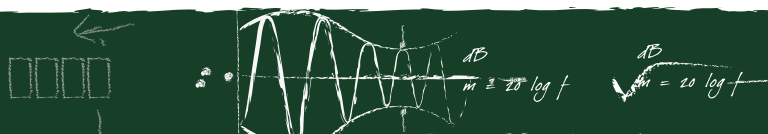
YOUR PICTURES

Camouflaged pannel antenna

Jose Miguel Mosquera sends us this picture from Monterroso (Lugo), showing an antenna that was camouflaged not to interfere with a near monument.

The funny thing is it was not enough to cover it but to paint it with the same colour of the near wall ■

Coaxdata installation parameterization

Coaxdata systems are not just an interface converter, but a proffesional network extension system for operators that adapts the service provisioning and the offer to the customers.

CoaxData systems allows to use the TV network (and/or electrical) to distribute Internet signales without the need of rewiring, **improving the transmission quality and minimizing the WiFi signal effects on the end users (low signal option).**

Both the installation and configuration of these devices is easy, which is a clear advantage for the end user.

Usually, it's enough to place a CoaxData unit (769201, 769202, 769203) next to the ISP router, configured as a Master, and install as many units as needed as an Internet hotspot (Ref. 769301), configured as slaves.

CoaxData (Ref. 769301) can be configured as an Access Point in case the ISP router is the one responsible to assign IP addresses to the devices connected to the LAN network. It can also be configured as a rotuer, to assign these IP addresses using a DHCP server.

When configured as a router, the user can generate subnetworks within the main LAN so the devices connected will not "see" the hosts that belong to this main LAN.

**The ideal solution
to provide Internet access to all rooms**

MyNet WiFi provides an efficient, responsible and safe network, adjusting the power level accordingly to the current needs. The front panel of the device has a switch to commute between two different modes of operation (regular and low)

In more complex installations (hospitals, hotels, urbanizations), exists the possibility of making use of other features.

One of these features is the creation of VLAN (virtual LAN) networks. VLAN provides network segmentation, making the traffic data of the hosts travel through an specific route.

To do so, all four available interfaces can be used: coaxial eth0, LAN eth1, WiFi ath0 and default bridge br0.

As an example, an hotel can generate a WiFi network for clients only, and another one for internal use, both password protected. It is also possible to implement a billing system to charge customers for the Internet access.

Furthermore, CoaxData (Ref. 769301) includes the possibility of disabling the Reset, Wifi, etc buttons on the devices, hence avoiding any manipulation of the hotel guests.

With the **CoaxManager** application you can also configure the devices, check and generate reports of the network state, configure QoS, etc.

This configuration is made via a web access using an IP default address, as used in similar network devices.

When there are many CoaxData devices within the same installation, it is a huge advantage to access them remotely using only an IP address. To do so, a particular DHCP server is used, to reserve the MAC addresses to be linked to specific IPs.

Making use of a register where MACs, IPs and locations are linked, the installer can, at any time, administrate and access the devices (for example, the device installed in Room 525, with MAC addresss 00:0E:7C:17:2C:CD and IP 10.0.06). It is also possible to update firmware of the units remotely or change the configuration ■

IP	Internet Protocol
ISP	Internet Service Provider
DHCP	Dynamic Host Configuration Protocol

LAN	Local area network
MAC	Media Access Control
VLAN	Virtual Local área network

TELEVES FACILITIES

The Residences at Victoria Clube de Golfe (Vilamoura - Portugal)

The Residences at Victoria Clube de Golfe***** is a touristic complex of 145 apartments, next to Hotel Tivoli Victoria Hotel & Spa in Vilamoura (Portugal), and from which it gets to access to services.

Recently, the complex was given a MyNet WiFi service through a coax-data network. Making use of the former TV network distribution and

installing a CoaxData WiFi gateway (Ref 769301) in every room and a CoaxData as master in the main register (Ref. 769202). Two WiFi networks were configured: one for the clients and other one for the hotel.

CoaxManager application will allow the IT administrator to locally and remotely manage the traffic priorities ▮

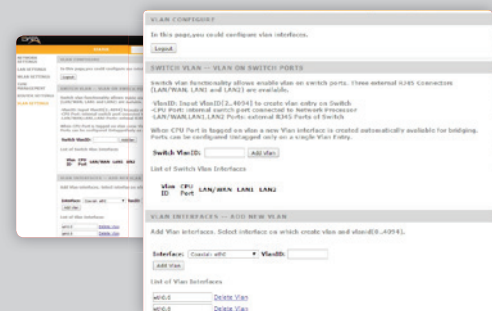| INSTALLER:	Avelino S. Pereira
Integration partners:	IPWorks & Next toYou

MyNET WiFi: one network for clients and another one for the hotel

For security reasons, it's convenient that the LAN network of the hotel staff remains independent from the client's one.
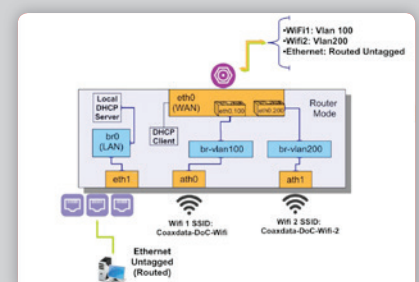
CoaxData Ref. 769301 permits the creation of a VLAN in the WiFi interface to set up two different WiFi independent netwoks, with different SSIDs and passwords. Doing so, devices connected to the client's network will not be able to "see" the other devices conneted to the staff network ▮
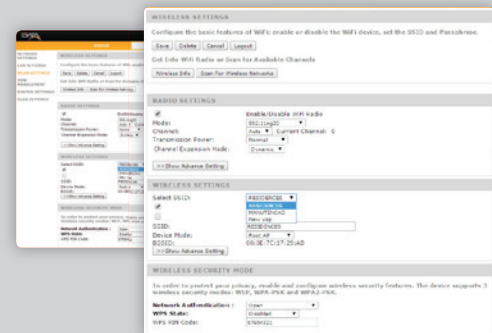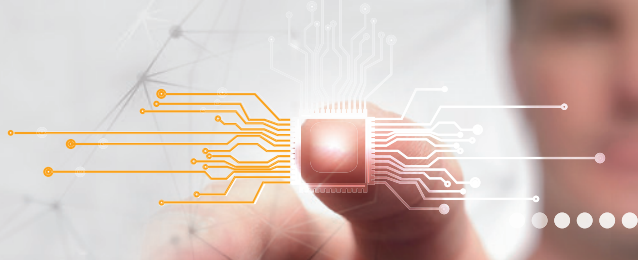

CoaxData with 2 independent WiFi networks (different SSIDs)

CoaxData with 2 VLAN (tags: eth0 and eth0.8)

DID YOU KNOW..?

...Televes is one of the Leading Brands of Spain?

Foro de Marcas Renombradas Españolas

Televes

The forum of Leading Brands of Spain is an strategic alliance public-privatate formed by the main spanish companies with leading brands in their sectors, and with international outreach that seeks excellence in matters such as country image, intellectual property, finance and human resources.

Televes is member of the FMRE from 2002, actively collaboring to promote further abroad our higher technological standard ▢

Several interfaces of a CoaxData with 2 VLAN

TV through GPON networks

GPON networks are nowadays the most common type of infraestructure deployment used by operators worldwide, mainly due to its flexibility and performance.

Generally used over fibre optics infraestructures that make use of a device (called OLT) that multiplexes the data traffic between the user and services. Users are linked to this network by single wavelength channels, or lambdas, which represent a better service/cost ratio than other FTTH technologies.

On the other hand, over the last decade Triple Play services (TV, data and voice services offered altogether) have been largely deployed over broadband. These services travel through the physical layer as an unique high speed data stream.
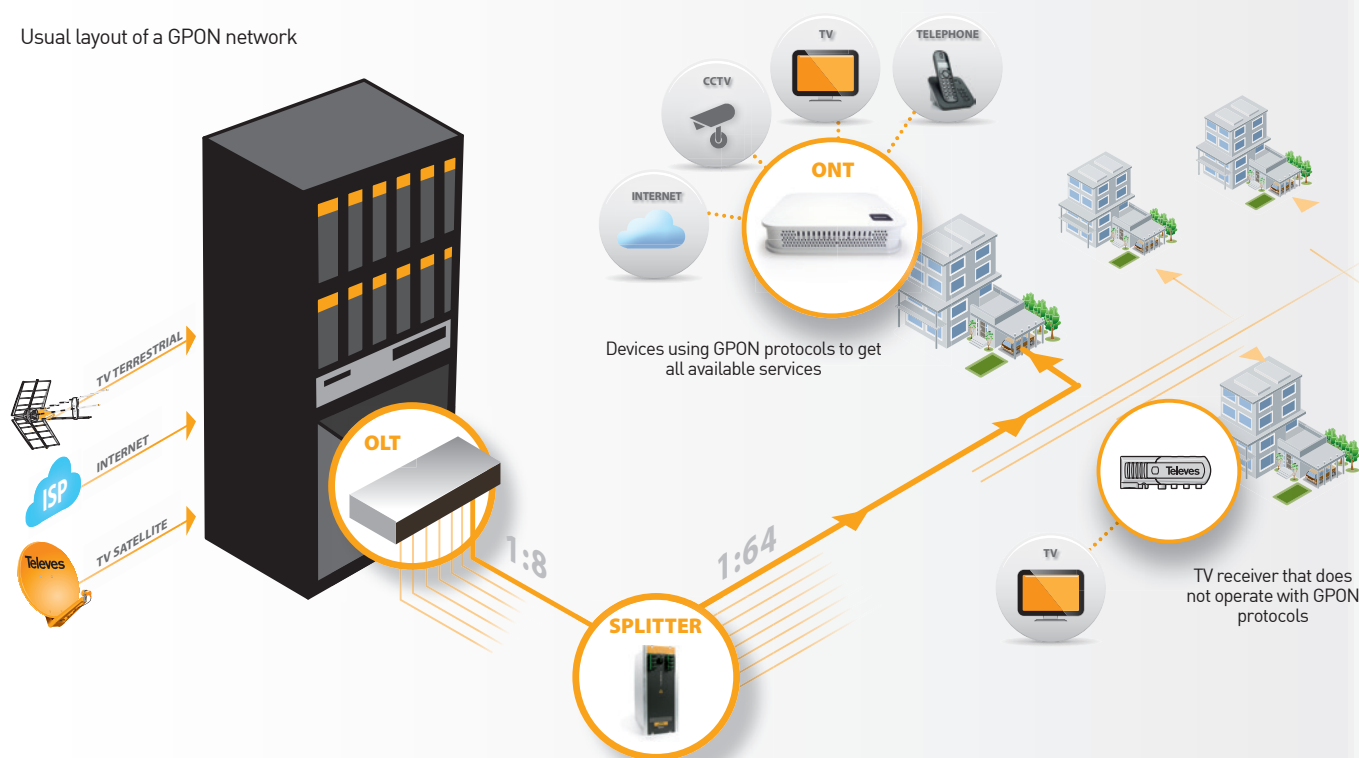
The novelty of these two concepts can cause the wrong assumption that GPON and Triple Play are inevitably linked to each other.

Shall be highlighted that GPON refers not only to a specficic type of network architecture down to the physical layer but to the definition of how the services are packed and configured. In a typical scenario, three lambdas at 1310, 1490 and 1550nm are assigned to down-stream/upstream and CATV, respectively.

Therefore, **a GPON network is not required to include IPTV services through the data streams**, since TV services can be sent over the third lambda (1550nm), freeing the other two to send broadband data and voice services only.

It is a clear advantage for those users that own the network and want to remain independent from the specific operator conditions on TV services offer ▮

Usual layout of a GPON network

Devices using GPON protocols to get all available services

TV receiver that does not operate with GPON protocols

coax DATA

the only one with MyNET WiFi technology

DATA OVER COAX GATEWAY

Televes

Wifi · WPS · Coax Link · Coax Hibrid · WLAN WIFI · Internet · Power WPS

Off · Low · Normal

The most efficient way to access the Internet

Televes' Mynet WiFi technology allows you to configure your
CoaxData Wireless Acess Point in low power mode,
hence the possibility to create network access microcells
providing an improved performance to all users connected

— Power + Efficiency

TV and Internet services Integration on coaxial networks

>1 KM
Signal Extension without amplification

Creation of Users Segmented networks

Monitoring of the created networks with the *Access Control* application

Televes®