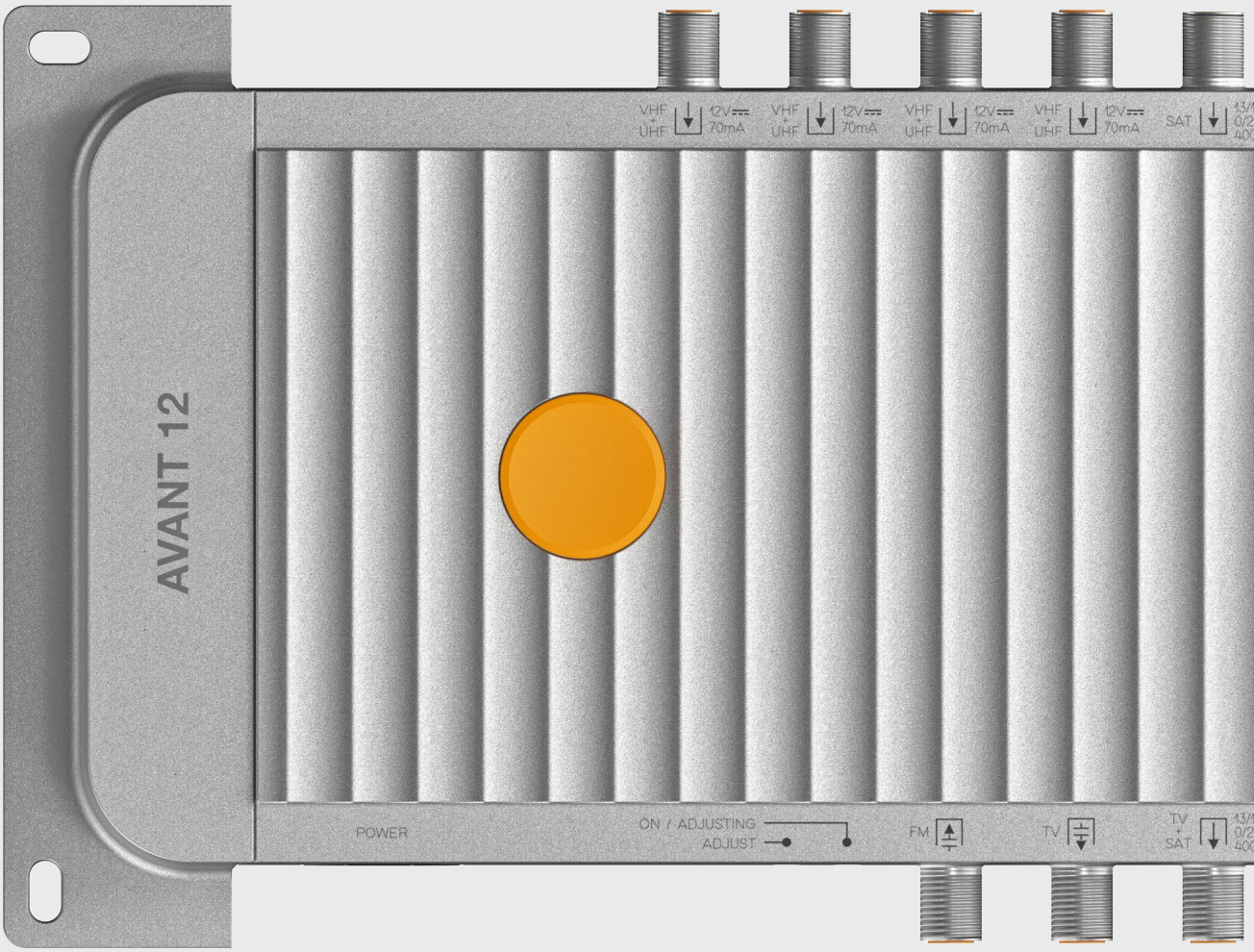
GOOD DESIGN

GERMAN DESIGN AWARD GOLD 2025

EUROPEAN PRODUCT DESIGN AWARD

reddot winner 2025

Unprecedented output level to reach places others cannot



Multi-input programmable amplifier
with 32 digital filters for terrestrial and satellite distribution.

Televes®

Programmable amplification that evolves with the market

- 1998 Avant
- 2002 Avant 5
- 2009 Avant HD
- 2014 Avant 7
- 2016 Avant 9
- 2020 Avant X
- **2025 Avant 12**

Programmable amplifier units provide full control over the distribution of television signals in buildings and homes. Their purpose is to filter the desired channels coming from the DTT signal captured by the antennas, and then amplify them to ensure they always reach the final outlets of each home with balanced levels.

The new Avant 12 pushes the limits once again and offers new features designed to enhance the installer's experience: **from an unprecedented output level (up to 128 dBµV) to wireless programming designed for the most demanding users, this unit makes collective installations easier, faster and more efficient, even in the most technically complex scenarios.**

100% Televes philosophy: designed, developed and manufactured entirely in our robotic facilities.

*This unit is part of a new **generation of award-winning products,** recognized with 4 prestigious international awards, highlighting its innovative design based on two key concepts: modularity and design language.*

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Avant 12 at a glance

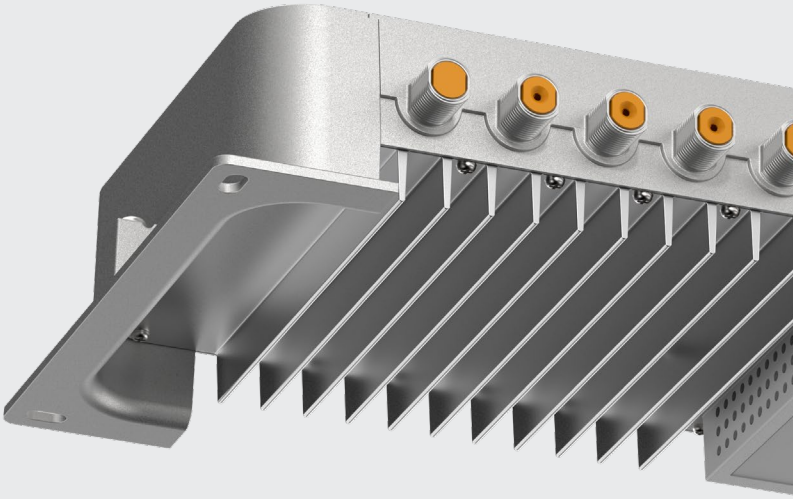
Avant 12 is a multi-input amplifier that allows individual programming of terrestrial channels available though 4 VHF+UHF (DTT) inputs, in a total of 32 digital filters, achieving optimal amplification and signal balance between them. It is perfect for any type of installation, from individual homes to large-scale collective installations, **with a high output level that makes a difference in the most challenging scenarios (up to 128dBµV according to EN50083).**

Additionally, it includes 4G/5G filtering, allowing the unit itself to discriminate the filter programming up to channel 48, thus eliminating telephony interference (LTE700).

DVB T

DVB T2

RED COMPLIANT

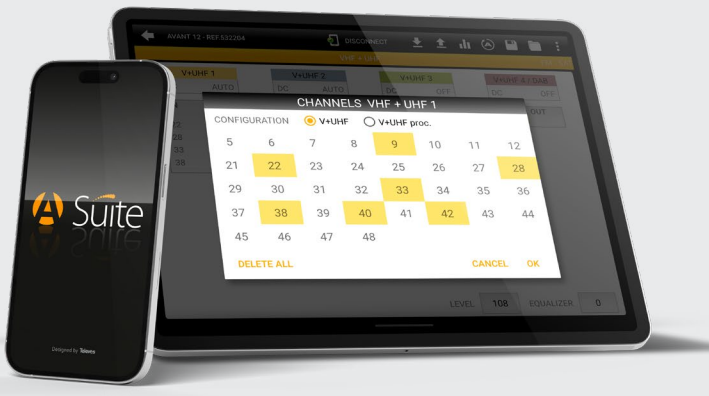


Compatible with DVB-T and DVB-T2, the unit has 5 inputs that can be configured in 2 different operating modes, depending on the antenna bands available in the installation:

- 1 FM input and 4 mixed VHF+UHF inputs
- 1 FM input, 1 DAB input, and 3 UHF inputs

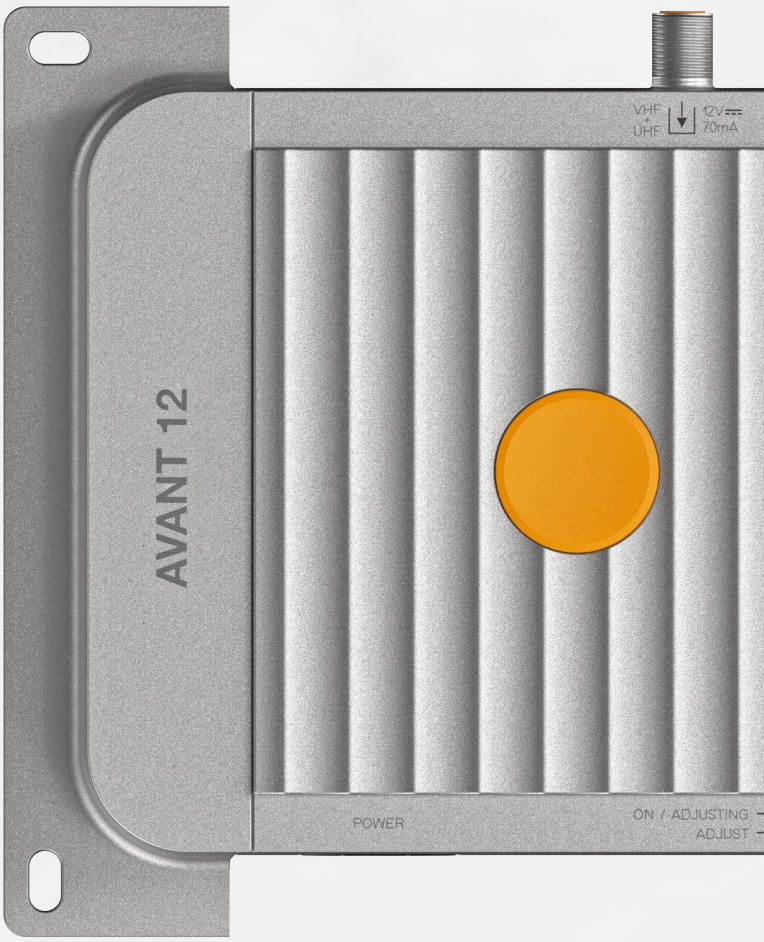
The SAT version includes an additional IF input and offers 2 outputs, one with terrestrial signal only and the other with a mix of terrestrial and satellite signals.

Its configuration is done wirelessly (Bluetooth®), conveniently from a smartphone or tablet (Android/iOS) using the ASuite app. The user can choose between automatic programming, where the device itself assigns the filters and configures the levels in the best possible way, **or advanced programming**, where the professional customizes the filters and defines the unit's parameters. It is also possible to combine both methods: launching an initial self-programming, and subsequently adjusting the parameters the professional prefers. This way, the process is streamlined without compromising the precise and personalized result that only an installer can provide.

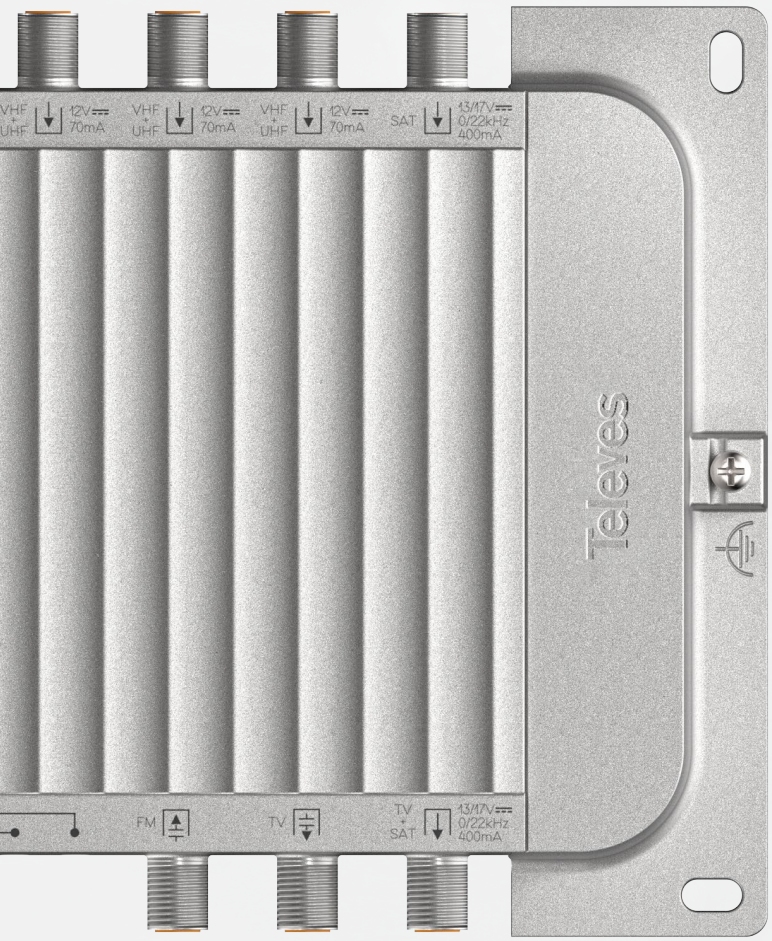


Features that make the difference

- **Up to 32 individually programmable filters** , with individual digital filtering for each channel, including adjacent channels.
- **High selectivity VHF/UHF digital filters:** >30dB rejection (@±1MHz).
- **Digital processing of the channels,** providing a perfect balance of signal levels across channels at the output.
- **Automatic Gain Control (AGC) for each filter**. It also allows fine adjustment of the output level after regulation.
- **TForce technology:** the terrestrial signal level is always stable and adapted to the optimum value.
- **High output level, enabling coverage of a larger number of outlets**(up to 128dBµV according to EN50083, or 124dBµV according to DIN45004B).



Full-size image
(201 x 120 x 42 mm, 924 gr.)



- A single unit combining **2 distribution modes:** 4 mixed inputs for VHF/UHF, or one input for DAB and the remaining 3 for UHF.
- **Amplification and balancing of all signals,** including satellite input in SAT models.
- SAW (Surface Acoustic Wave) type filter for **rejecting 4G/5G signals** from channel 48 onwards, with the best selectivity and stability.
- Current flow through the inputs for **antenna power supply** when required by the signal. Additionally, the LNB can be powered locally/remotely via the IF input.
- High shielding chassis (Zamak) to **protect against electromagnetic interference**.
- **32 User Band configuration of a dynamic dLNB** via ASuite for satellite installations with dCSS technology.

Bluetooth®

ASuite

ASuite allows managing the device wirelessly (Bluetooth®), from a smartphone or tablet (Android/iOS).

With 2 programming modes:

- **Automatic programming:**
  The unit itself assigns the filters and adjusts the channel levels, as well as activating the antenna feed when it detects that the signal requires it (PRO models only).
- **Advanced programming:**
  The installer controls all configuration parameters and performs the programming themselves.

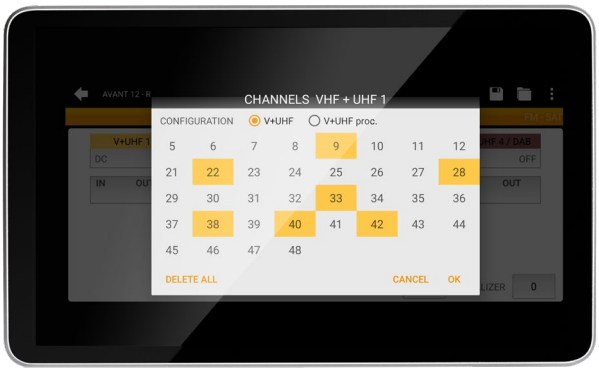
No wires, no limits: Asuite via Bluetooth®

ASuite is the mobile app that lets you easily and intuitively manage and configure the unit during the installation, using your smartphone or tablet via Bluetooth®. This allows for a completely wireless connection.

ASuite is available for free on both Android and iOS, and offers a wide range of functionalities to maximize the potential of the unit:

Programming of channel filters

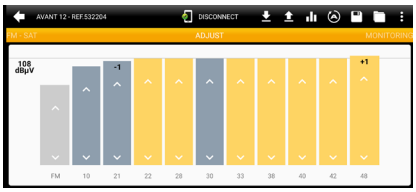
The desired channels are selected from each of the available inputs, with a filter assigned to each, up to a maximum of 32 in total. Additionally, the selected channels can be processed to shift the output frequency.



Auto-tuning of channel levels

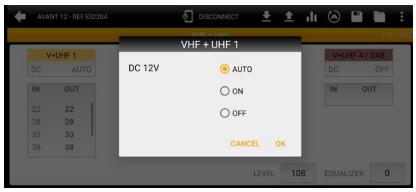
The signal level of each channel is processed by the unit, extracting the maximum possible level and creating a balance across all filtered channels so that there are no signal fluctuations between them.

Subsequently, ASuite allows a ± 3dB adjustment to the automatic adjustment made by the unit. This is done manually and independently for each filter, for those channels that require finer tuning.



Antenna power activation

Activates the current flow through each output separately to power the connected antennas when the captured signal requires it.

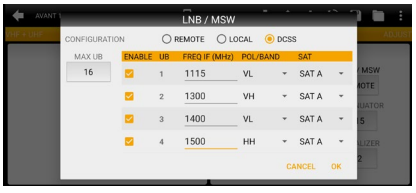


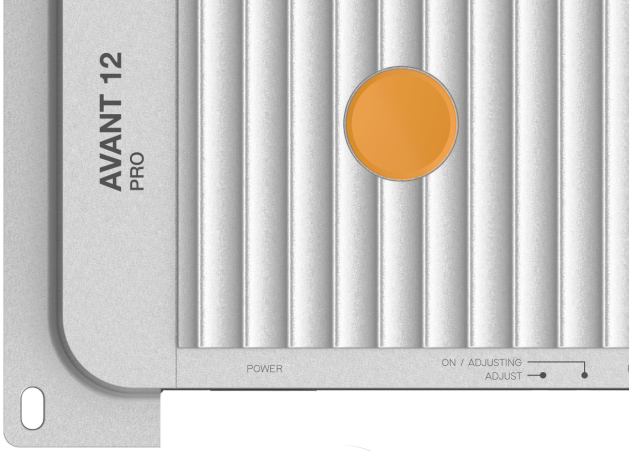
Configuration cloning

ASuite allows configurations to be created without being connected to the unit. These can be saved and later retrieved during installation, saving time for the professional.

User Band configuration for dCSS technology

In dCSS technology installations, up to 16 User Bands can be configured in the list to be assigned to the dynamic dLNB connected to the SAT input of the unit.





Advanced Functionalities

(PRO models only)

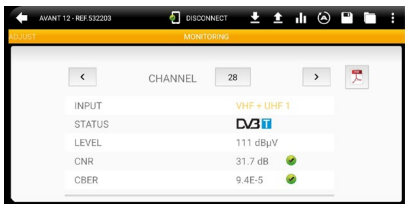
Autoprogramming

The unit processes the channels at the inputs, selecting the most important ones and assigning a filter to each. Subsequently, it performs an auto-tuning to balance the filtered channels' level.

All of this is done in under 1 minute.

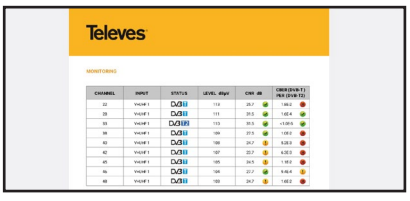
DVB-T/T2 parameter monitoring

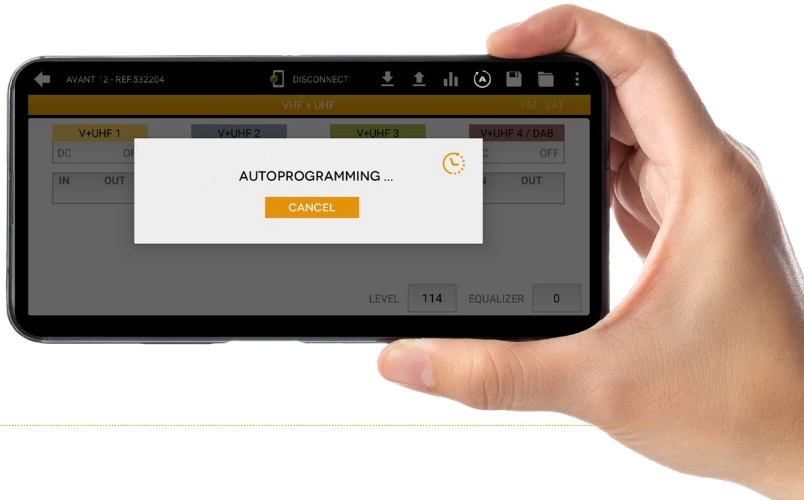
ASuite monitors characteristic parameters of the DVB-T and DVB-T2 standards, such as CNR, CBER (DVB-T), or PER (DVB-T2), and displays them in real time on the application for each filtered channel.



PDF report generation

The same parameters monitored in the previous function can be complied into a report that the application generates, allowing it to be downloaded. The installer will always have access to a detailed report, in PDF format, of the installation status.





An Avant 12 for each scenario

The Avant 12 series has 4 different models, depending on the type of installation for which the amplifier is intended and the number of functionalities it offers:

	532201	**SAT** 532202	**PRO** 532203	**PRO SAT** 532204
Terrestrial television (VHF/UHF)	✓	✓	✓	✓
FM/DAB radio	✓	✓	✓	✓
Satellite	-	✓	-	✓
Number of programmable filters	32	32	32	32
Power supply to mast amplif./antennas	✓	✓	✓	✓
Access to amplifier's configuration	Bluetooth®	Bluetooth®	Bluetooth®	Bluetooth®
Storage of configurations	✓	✓	✓	✓
Configuration cloning between models	✓	✓	✓	✓
Channel auto-tuning (ASuite/Physical button)	✓	✓	✓	✓
Channel autoprogramming (ASuite)	-	-	✓	✓
Channel monitoring	-	-	✓	✓
PDF report generation	-	-	✓	✓

PRO models
include additional functionalities, especially designed for users seeking extra simplicity and agility in the installation.

SAT models
include an additional IF input, allowing the deployment of the satellite signal mixed with the terrestrial signal for installations that require it.

Their main advantage is the autoprogramming function, executable from ASuite,, where the unit analyzes the inputs to determine the best DVB-T/T2 channels for programming and adjustment.
All of this is done in under one minute.

Additional features included in PRO models are **DVB-T/T2 parameter monitoring**,

and the **generation of PDF reports** of the installation status, both available from the ASuite app.

Detailed technical information

		532201			SAT 532202			
		PRO 532203			PRO SAT 532204			
Bands		VHF+UHF		FM	VHF+UHF		FM	SAT
No. of inputs		4		1	4		1	1
Frequency range	MHz	174-230	470-694	87-108	174-230	470-694	87-108	950-2150
No. of filters		32		-	32		-	-
Number of channels per filter		1		-	1		-	-
Max. gain	dB	75	78	29	71	75	25	41
Gain regulation	dB	AGC		0-25/OFF	AGC		0-25/OFF	0-30/OFF
Manual adjustment after auto-tuning	dB	±3		±5	±3		±5	-
Slope	dB	-	0-5	-	-	0-5	-	0-15
Recommended input level	dBµV	40-100		79-104	40-100		79-104	69-99
Output level	dBµV	121* 125**	124* 128**	114* 118**	117* 121**	120* 124**	110* 114**	123**
Programmed output level.	dBµV	87-115	90-118	80-108	83-111	86-114	76-104	-
Noise figure	dB	7	6	7	7	6	7	-
Selectivity	dB	>65*** (@±8MHz)		>20 (@±20MHz)	>65*** (@±8MHz)		>20 (@±20MHz)	>40 (@47-862MHz)
Power supply inputs	Vdc	12 (AUTO/ON/OFF)		-	12 (AUTO/ON/OFF)		-	13-17 (22/0 KHz)
Max. input current	mA	70		-	70		-	400 (remoto) 350 (local)
Network voltage/frequency	Vac/Hz	220-230 / 50-60			110-230 / 50-60			
Total consumption	mA	165			355			
	W	14.9			26.9			
Ingress protection	IP	20			20			
Operating temperature	ºC	-5 ... +45			-5 ... +45			
Dimensions	mm	201 x 120 x 42			201 x 120 x 42			
Weight	g	924			924			

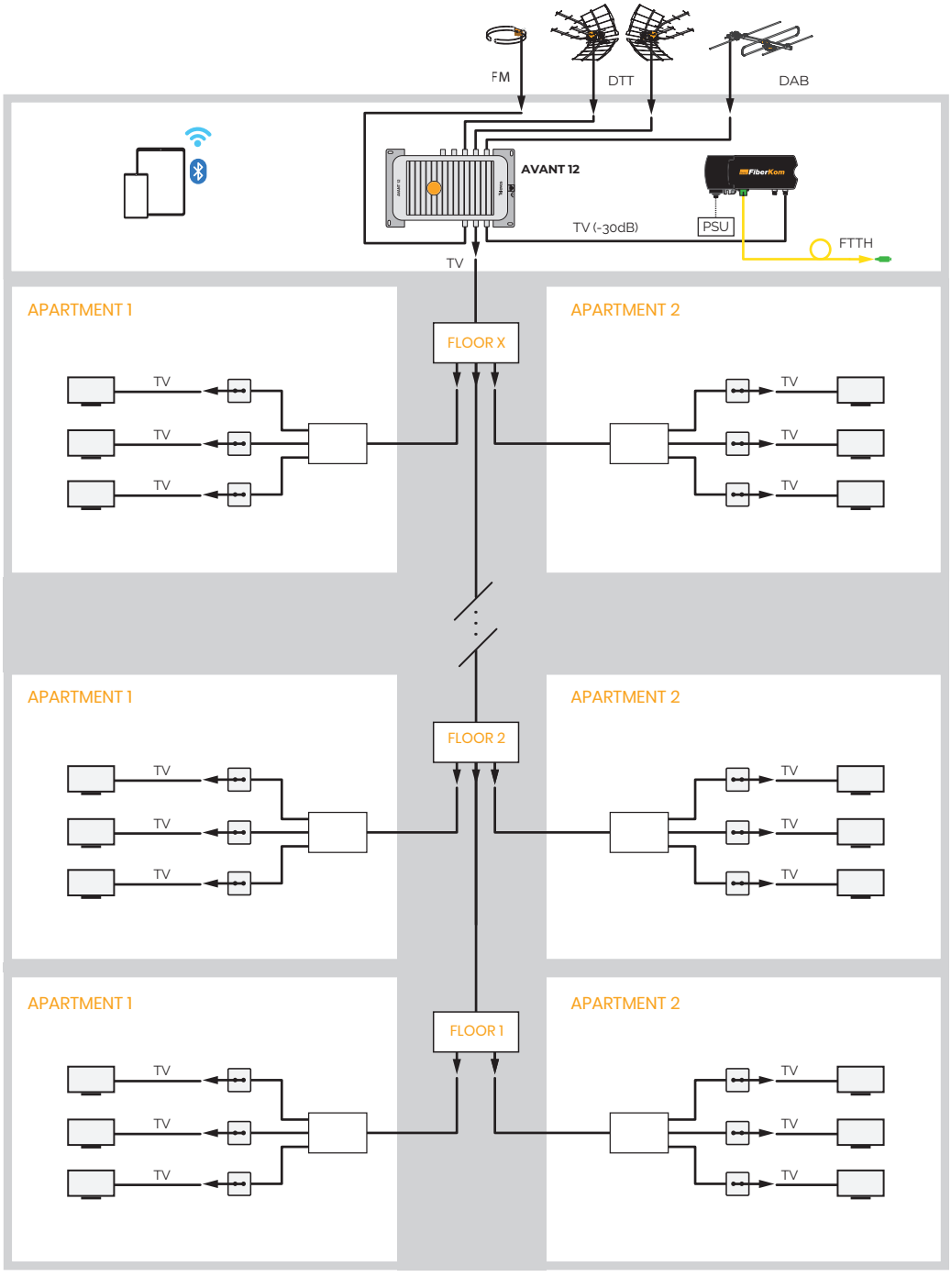
(*) DIN45004B (**) EN50083 IMD3 2Ch -35dB (***) >30dB (@±1MHz)

APPLICATION EXAMPLES

Collective installation with DTT (Avant 12)

The building has two UHF terrestrial antennas and one DAB antenna. In addition, it also has an FM radio antenna. The Avant is installed after the antennas to program and adjust signal levels before the signal is distributed down the line.

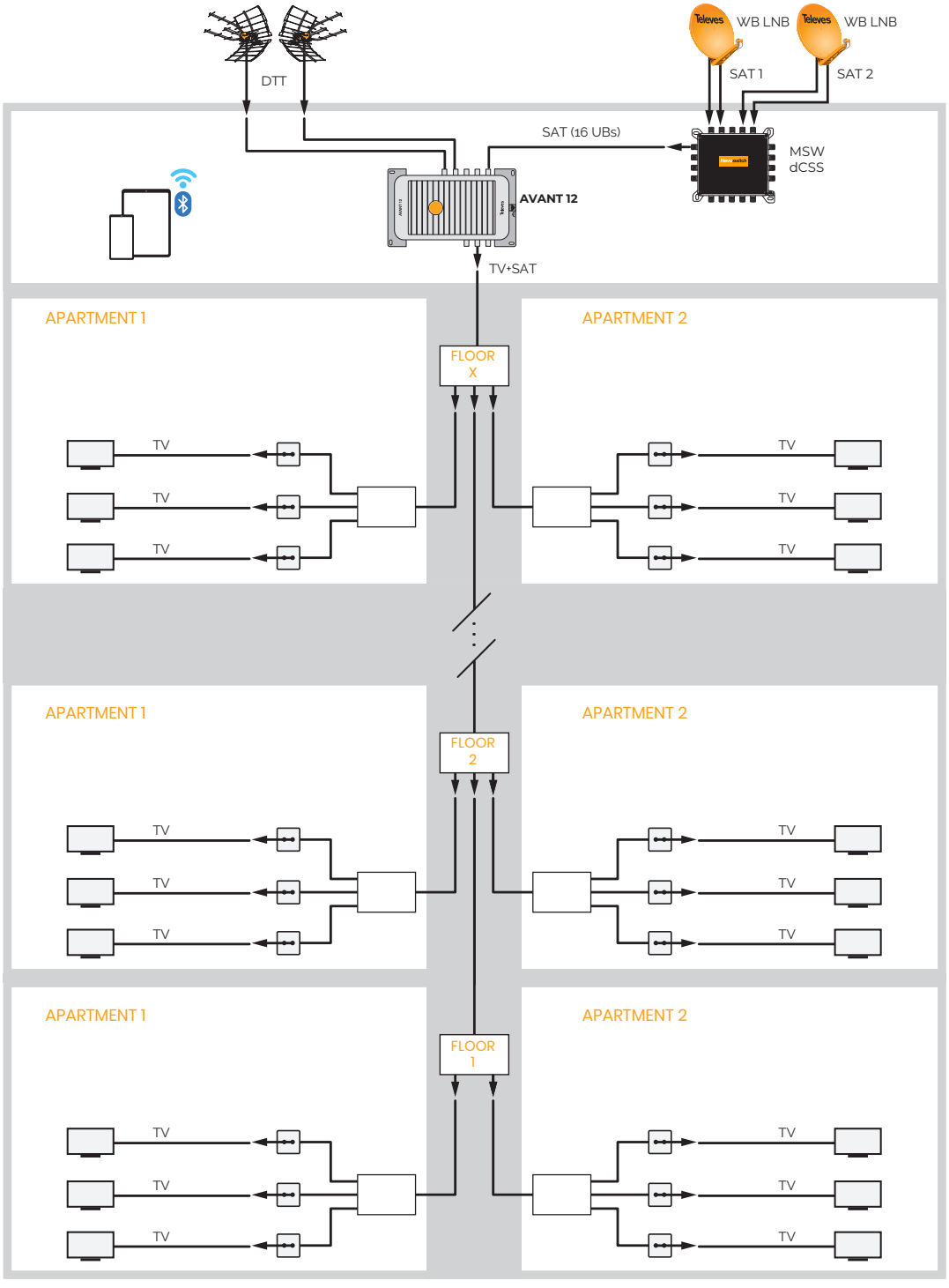
The output of the Avant will serve the building's main distribution line to send the signal to the final residential outlets. **The test output (-30dB) can be connected to an F.O. transmitter** with a low input level for FTTH network deployment in the building.



Collective installation for terrestrial and satellite distribution (Avant 12 SAT)

The building has two UHF antennas for terrestrial signal reception together with two dishes with WideBand LNBs for satellite signal reception. The satellite signals are managed by a multiswitch using dCSS technology. **The User Bands are sent directly to the Avant 12 SAT through its satellite input,** which processes and mixes them under the same distribution together with the DTT signals received through the terrestrial inputs.

The Avant is installed after the reception, to program and adjust signal levels before starting the signal downstream. **The TV+SAT output of the Avant serves the main downstream of the building** to send combined DTT and satellite signal to the final apartment outlets.



Televes®

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