

### PROGRAMMABLE HEADEND AMPLIFIER FOR MATV & SMATV



## **BEYOND YOUR EXPECTATIONS**

### **CHOOSE THE PROGRAMMING MODE YOU WISH...**









### PROGRAMMABLE HEADEND AMPLIFIER FOR MATV & SMATV

### **DESCRIPTION**

The Avant 9 unit is a programmable multiband amplifier, which main mission is to achieve a programmable amplification and balance of different RF input signals.

**UHF INPUTS**: the channels present in these inputs can be **filtered and adjusted using up to 10 filters**. Each filter can be tuned on any of UHF channel (21 to 60) and its bandwidth can contain up to 7 channels

The disposition of these 10 filters is configurable based on the number of channels present on each UHF input.

In the case of 532022, the change in the UHF frequency range is automatic, through its filters, the programable amplifier switch between LTE700 (470...694MHz) and LTE790 (470...698MHz) adapting to the new digital dividends.

**FM INPUT**: You can choose whether to enable an FM input or not. Should this input be enabled, it will be amplified and its output level set to 10dB below the lowest-level UHF channel (taking into account the equalization slope).

VHF INPUT: a VHF input can also be enabled. But in this case, its signal level will be 3 dB below the lowest-level UHF channel.

**IF INPUT**: satellite input can be assigned an attenuation between 0 and 30dB, and an equalization between 0 and 15dB. **The LNB can be configured** to be REMOTELY (user STB) or LOCALLY powered by enabling the 22kHz tone and configuring the supply voltage value to 13V or 17V.

- Avant (9)

  BASIC SAT BASIC
- Output signal automatic adjustment
- High output power
- Multiple channel / inputs combinations
- Automatic band adjust LTE700/790 (only ref. 532022)
- Up to **10 programmable filters** from 1 to 7 channels
- **High adjacent** channel rejection (>30dB)
- Two power supply modes on the SAT input: local or remote
- **Led displays** show both unit and signal status.

The new AVANT9 multiband amplifier offers a full product range to meet your requirements

	RASIC	PKO
UHF Inputs	2	3
Self programming	-	✓
VHF monitoring	-	✓
UHF monitoring	-	$\checkmark$
Report production	-	✓

### **HIGHLIGHTS**

- Configuration and adjustment using ASuite application for Android or Windows
- Zamak chassis providing high shielding effectiveness
- The product range consists of five references
- New size, more compact and lightweight
- Automatic change from LTE700 to LTE790 (ref.532022)

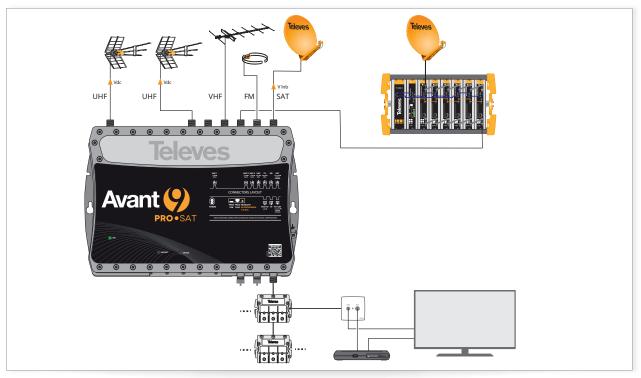
- PRO versions include three new functions:
  - Self-installation: channel search and self-adjustment
  - Signal level and SNR (Signal to Noise Ratio) monitoring
  - Installation report generating (PDF file)
- Energy-efficient thanks to its low power consumption: up to 25% lower than previous models
- **Easy-to-replace** power supply

SCAN TO SEE THE VIDEO
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REF.	DESCRIPTION		EAN 13
532001	Avant9 Basic (FM-VHF-MATV-UHF-UHF)	LTE790	8424450181553
532011	Avant9 Basic SAT (FM-VHF-MATV-UHF-UHF-FI)	LTE790	8424450181522
532021	Avant9 Pro (FM-VHF-MATV-UHF-UHF-UHF)	LTE790	8424450181539
532031	Avant9 Pro SAT (FM-VHF-MATV-UHF-UHF-FI)	LTE790	8424450181546
532022	Avant9 Pro LTE700/790 (FM-VHF-MATV-UHF-UHF-UHF)	LTE790 LTE700	8424450186831



■ Three programming options are available for the multiband amplifier:



# App ASuite for PC or tablet / Android smartphone, via USB connection (OTG cable included):



The multiband amplifier configuration is performed in a friendly and intuitive environment. A configuration can be defined and stored, even when not connected to the multiband amplifier; this configuration can be retrieved later for installation and adjustment.

Furthermore, for PRO versions, the application allows the monitoring of channel quality parameters and the generating of an installation report that includes the configuration applied.





### Universal programmer (ref. 7234):

The unit is compatible with the programmer, ensuring backwards compatibility.



## Automatic programming by means of the "AUTO-PROGRAMMING" button (press and hold) of the multiband amplifier itself:

Thanks to a tuner that is able to detect DVB-T channels for UHF and VHF inputs, the unit performs an automatic programming of the filters when executing this option, as well as the appropriate tuning to avoid intermodulation.

By pressing the **READJUST button** (short press), the unit readjusts to the stored configuration values.

Once tuned, a manual **fine tuning** on the multiband amplifier to slightly adjust the UHF, VHF and FM filters' gain.

DESCRIPTION





- 1 UHF1 Input (+12Vdc\_50mA)
- 2 UHF2 Input (+12Vdc\_50mA)
- 3 UHF3 Input (+12Vdc\_50mA)\*
- 4 VHF Input
- 5 MATV Input
- 6 FM Input

- 7 SAT Input (+13/17 Vdc\_400 mA, 0/22 kHz) \*\*
- 8 TV+SAT Output (+13/17 Vdc\_400 mA, 0/22 kHz)
- 9 TV Output
- 10 Test TV Output
- 11 Readjustment
- 11 Readjustent + Ch search\*

- 12 RJ45 Prog.
- 13 USB Prog.
- 14 Error LED
- 15 Adjustment LED
- 16 Power LED
- 17 Power supply connector

### **AVANT9: PROGRAMMABLE HEADEND AMPLIFIER FOR MATV & SMATV**

#### **AVANT 9**

Inputs		UHF1	UHF2	UHF3 (*)	BIII / DAB	120 - 862 MHz		FM	FI SAT (**)	
Band	MHz	470 - 790 470697/790 (***)			174 - 260	VHF	UHF	87 - 108	50 - 2150	
Maximum gain	dB	55(BASIC) / 51(PRO)			49 (BASIC) / 45 (PRO)	40 (BASIC) / 36 (PRO)	41 (BASIC) / 37 (PRO)	34 (BASIC) / 30 (PRO)	45	
		10	0	0	-	-	-	-	-	
Filter configuration	N° (PRO)	9	0	1	-	-	-	-	-	
		8	0	2	-	-	-	-	-	
		7	3	0	-	-	-	-	-	
		7	2	1	-	-	-	-	-	
		7	1	2	-	-	-	-	-	
		6	4	0	-	-	-	-	-	
		6	3	1	-	-	-	-	-	
		6	2	2	-	-	-	-	-	
		5	5	0	-	-	-	-	-	
		5	3	1 2	-	-	-	-	-	
		10	0	-	-	-	-	-	-	
		9	1	-	-	-	-	_	-	
	Nº	8	2	_	_	-	_	_	_	
	(BASIC)	7	3	_	_	-	-	_	_	
		6	4	-	_	-	-	_	-	
		5	5	-		-	-	-	-	
Number of channels per filter	Nº		0 - 7		-	-	-	-	-	
Slope	dB	0 - 5		-	-	-	-	0 - 15		
Optimum input margin	dΒμV		60 - 105		63 - 88	72	74	71 - 96	65 - 95	
Gain regulation	dB		0 - 20		0 - 25/OFF	-	-	0 - 25/OFF	0 - 30	
Manual regulation	dB	±	5 per filt	er	±5	-	-	±5	-	
Output level	dBμV ¹	122 (BASIC) / 118 (PRO)		122 (BASIC) / 118 (PRO)	122 (BASIC) / 118 (PRO)		122 (BASIC) / 118 (PRO)	-		
Output level	dBμV ²	126 (BASIC) / 122 (PRO)		126 (BASIC) / 122 (PRO)	126 (BASIC) / 122 (PRO)		126 (BASIC) / 122 (PRO)	123		
Programmable output levels	dΒμV		100 - 115 (BASIC) / 96 - 111 (PRO)		97 - 112 (BASIC) / 93 - 108 (PRO)	97 - 112 (BASIC) / 93 - 108 (PRO)	100 - 115 (BASIC) / 96 - 111 (PRO)	90 - 105 (BASIC) / 86 - 101 (PRO)	-	
TEST output	dB					-20				
Noise figure	dB		10		10	-	-	10	9	
Rejection	dB	>30 (±16 MHz)		>20 (470 MHz)	-	-	>20 (±20 MHz)	>40 (87 - 862 MHz		
Power supply inputs	Vdc	12 (AUTO/ON/OFF)		-	-	-	-	13/17 (22 kHz / 0 kHz		
Maximum current per input	mA	50 (auto)		-	-	-	-	400 (remote) / 200 (local)		
Voltage / RED frequency	Vac / Hz					196 - 254 / 50 - 60				
Maximum power	W	18,3 (ref.532031) / 11,4 (ref.532021, 532022) / 17,4 (ref.532011) / 10,4 (ref.532001)								
Maximum operating temperature	°C	45								
Weight	g	1620								
Dimensions	mm	273 x 203 x 57								



**AUGUST 2017** 



<sup>\*</sup> PRO versions only.

<sup>\*\*</sup> SAT versions only.

<sup>\*\*\*</sup> AUTO, only ref.532022.

<sup>1</sup> DIN45004B.

<sup>2</sup> EN50083 IMD3 2CH-36dB.