

MATV compact headend with agile SAW filters

SAF-HD 10, SAF-HD 7

SAF-HD



New MATV compact headend for **DVB-T and DVB-T2** signals filtering, including 7 or 10 UHF agile active SAW filters with very high selectivity.

The “*All-in-One*” solution includes 10 (or 7) agile UHF filters, an FM + VHF/DAB filter with separate adjustment, a power supply, a launch amplifier and the on-board programmer.

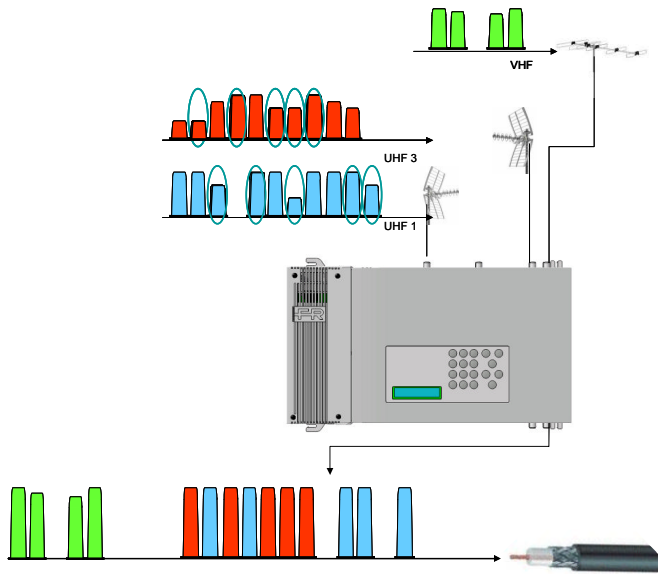
All the filters can be set via the on-board programmer (or via PC) to any UHF frequency and can even be used as a channel converter in the same frequency band.

Main Specifications

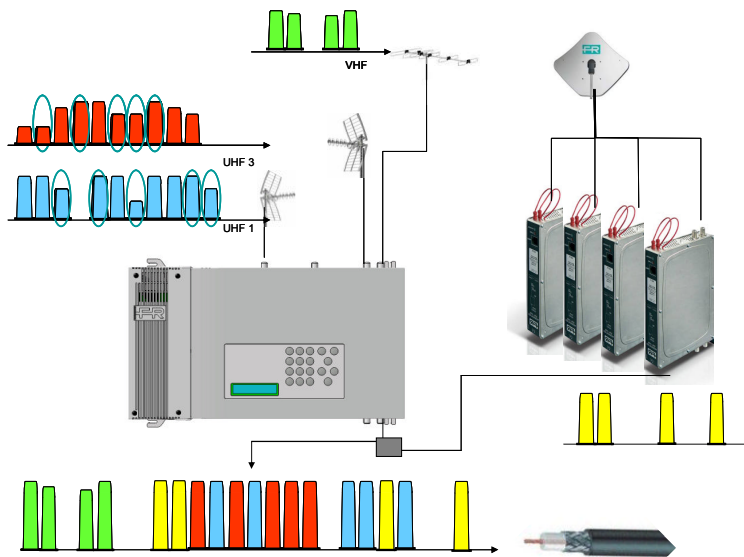
- **Agile filters with SAW technology** allow you to choose and change as you prefer the distributed channel.
- **The very high selectivity** allow the perfect equalization of all the signals even if strongly unbalanced.
- It's possible to use adjacent frequencies for transmodulation of satellite programs (SAT to DTT) or external sources contents (PC, cameras ...) without compromising of the signals quality.
- **A.G.C. = Automatic gain control**, to keep stable the output power even if the input power received is floating.
- **DVB-T and DVB-T2 (High Definition) ready**: the main broadcasters are going to start with trial transmissions, the new technology is coming.
- The brand new **Auto equalisation function** of the filters can generate a very perfect power levelling (tenths of dB precision!!!) of each selected channel in a click.
- **USB Port** to upload or download all the settings to another SAF-HD.
- **The new switching power supply**, allows a strong reduction of the power consumption (up to 53%) and a cost saving for the end user (**GREEN PRODUCT**).
- **The new housing**, robust and elegant with zinc alloy die-cast cover, **is 50% smaller** than the old product, fitting to the narrowest technical room without fans inside the product .

		SAF-HD 10	SAF-HD 7
Fracarro code		272008	272009
UHF filters	N°	10	7
UHF filter characteristics			
Input frequency	MHz	470 - 862	
Input power per channel	dB μ V	50-73	
Max. input power	dB μ V	90 (for each UHF input)	
Bandwidth	MHz	8	
Selectivity	dB	≥ 14 @Cf \pm 4.25MHz ≥ 40 @Cf \pm 5MHz	
AGC dynamic	dB	≥ 23	
Flatness	dB	± 1	
RF Level adjustment	dB	10 (1dB step)	
Frequency offset	KHz	500 (125KHz step)	
Frequency accuracy	KHz	< 70	
FM+VHF/DAB filter characteristics			
Input frequency	MHz	VHF/DAB 174-240 FM: 87-108	
Input level	dB μ V	VHF/DAB 53-73 FM: 60-80	
Max. Gain	dB	VHF/DAB: 45 FM: 40	
Gain adjustment	dB	VHF/DAB: 20 FM: 20	
Flatness	dB	± 2	
General characteristics			
Max. output power	dB μ V	100	
Output level main adjustment	dB	15	
Input demixing		Input 1: filter 1-3 Input 2: filter 1-6 Input 3: filter 1-10	Input 1: filter 1-3 Input 2: filter 1-6 Input 3: filter 1-7
Noise figure	dB	9	
MER of DTT signals	dB	≥ 30 (CONVERSION and FILTERING single channel with MER \geq 36dB, no adjacent	
Remote power supply	V	12 on each UHF input, selectable via sw	
Max. remote supply current	mA@V	200@12	
Mains voltage	Vac, Hz	184-264, 50-60, Class II	
Consumption	W	33	30
Connectors	type	F female	
Dimensions (D. x W. x H.)	mm	360x225x60	
Operating temperature	°C	-5 to +55	
Programming		On board programmer PC (RJ45 port) USB (upload or download settings from other SAF-HD)	

Installation examples



UHF channels can be chosen from up to 3 different aerials and can be mixed together with FM or DAB signals. When a frequency conflict occurs (2 different programs received at the same frequency), it's possible to move one of them to another UHF clear frequency.



The very high selectivity (SAW filters) allows the perfect power equalization of all the filtered signals even if strongly unbalanced (15dB) signals are treated. Moreover it's possible to use adjacent frequencies for transmodulation of satellite programs (SAT to DTT) or external sources content (PC, cameras...) without compromising of the signals quality.

It's strongly recommended to install SAF-HD as in figure to guarantee the correct airflow inside the box.



Fracarro code	Item	Packaging	Quantity	Dimensions	Net Weight	Total Weight
			pcs	mm	Kg	Kg
272008	SAF-HD 10	Single	1	360x225x60	4.00	4.18
272009	SAF-HD 7	Single	1	360x225x60	4.00	4.18