## FRACARRO FRPRO LIGHT 5G

#### Headend with 65dB gain and a 108dBµV output level.



3-Input (VHF+DAB / UHF) smart self-programmable head-end for internal installation, 32 high selectivity filters.

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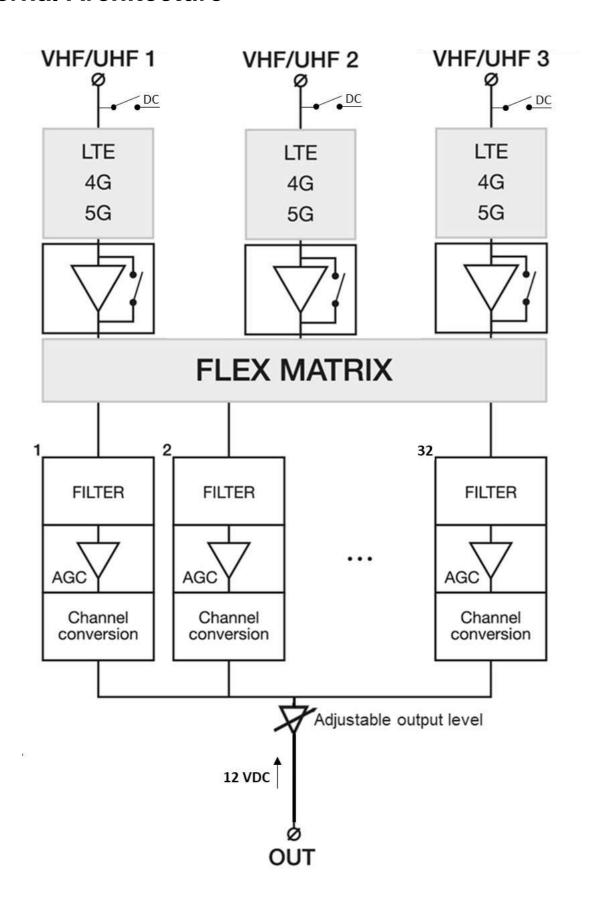
#### **Technical Info**

- <u>Self Equaliser</u>; Scans all input signals and automatically filters, amplifies and equalises all receivable channels.
- Repeated Mux Conversion; When channels are mirrored on different inputs, it's possible to either maintain the stronger channel and re-locate weaker channels on the LTE band or to remove the weaker channels altogether.
- This product can filter, convert, amplify and distribute many DVB-T channels (32 filters).
- Perfect equalisation of output signals with (AGC) on every output mux.
- 4G and 5G filtering.
- Fully programmable via keypad.
- 65dB gain with a 108dBµV output level.

FRPRO LIGHT 5G				
Code		287629		
Input				
Inputs		3 x VHF/UHF		
Input no.		3		
Connectors		F female		
Filter		Flexible Matrix 32/1		
DAB, III Frequency	MHz	174 - 240		
Frequency	MHz	470 - 694 (5G >40dB filter)		
Input levels	dΒμV	Self eq: 45 ÷ 109, Manual adj.: 37 ÷ 109		
		Output		
Outputs number		1		
Connectors		F female		
Mixed band	MHz	174 - 240 / 470 - 862		
Output power (60dB/IM3) Output power (36dB/IM3) Output power with 1-6 MUX Output power with 15 MUX Output power with 32 MUX Max Gain Channel Conversion Output level adjustment Additional VHF attenuator Cluster selectivity filter MER RF	dBµV dBµV dBµV dBµV dB dB dBµV	114 125 108 105 102 >65 Any VHF-UHF channel to any VHF-S-UHF channel 88-108 (VHF/UHF) 15 (VHF) 50@1MHz III+DAB / UHF: 35		
Return loss	dВ	>10		
Return ioss	иь	Features		
Power supply	V	12-15 (Included)		
Working temperature	°C	-5 to +50		
Dimensions	mm	190x165x50		
Conformity	111111	EN60065: 2004-06, EN50083-2: 2002-05		
Comorning	Parl	kage Contents		
1 x FRPRO LIGHT 5G 1 x Power Injector 1 x Power Supply	Faci	age Contents		

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## **Internal Architecture**



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#### **Reset to Default**

- 1. Unpower the unit, push and hold the " 🗸 " button while you repower the unit.
- 2. Release the "✓" button when the display shows "RESET FINISHED".
- 3. Set the country or region, this will determine the channel plan, language, etc.

#### **Menu Tree**

Push and hold the "✓" button for 2 seconds to access the menu.

<b>\</b>	RUN EQUALIZATION	INPUT V/U 1 - 3	OUTPUT	ADVANCED	EXIT	<b>+</b>
<b>\$</b>	START	PRE-AMPLIFIER	LEVEL	LANGUAGE	LOCK	
•	REP MUX CON.	DC	VHF ATTN	REGION	NO LOCK	<b>\$</b>
	SELF EQUALI.	ADD CHANNEL		DC VOLTAGE		
				BANDWIDTH		
				S-BAND		
		FW VERSION				
				SERIAL NUMBER		

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# **Run Equalization**

DISPLAY READOUT	EXPLANATION
∢RUN EQUALIZATI▶	Tap the "✓" button to enter the self equalization menu.

RUN EQUALIZATIO ▶START	Toggle down to START and tap the "✔" button to start scanning.
SCANNING	Scanning can take up to 1 minute.
6 CHANNELS DETECTED	When scan is finished, a channel map is automatically created. All detected input channels will be output on the same frequency (non-converting).
	Changes can be made to the channel map via the "INPUT

When channels are mirrored on different inputs, it's possible to either maintain the stronger channel and relocate weaker channels on the LTE band or to remove the weaker channels altogether. (see Repeated Mux Conversion)

When "REP MUX CON" is ON the stronger channel is maintained and weaker channels are relocated on the LTE band.

SETTINGS" menu if conversion is required.

When "REP MUX CON" is OFF the weaker channels are filtered.

REP MUX CON:ON \*SELF EQUALI:OFF When "SELF EQUALI" is ON, the device will automatically run a channel scan after a power interruption of 5 seconds or less.

When "SELF EQUALI" is OFF, the device will never run a channel scan automatically, it must be run from the menu.

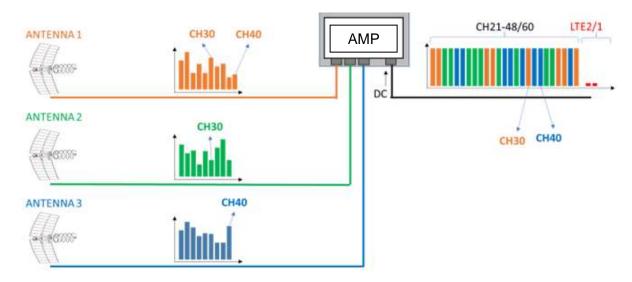
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## **Repeated Mux Conversion**

#### **OFF:** Weakest duplicate channel is filtered.

Example 1. CH30 > CH30 → CH30 is passed → CH30 is filtered

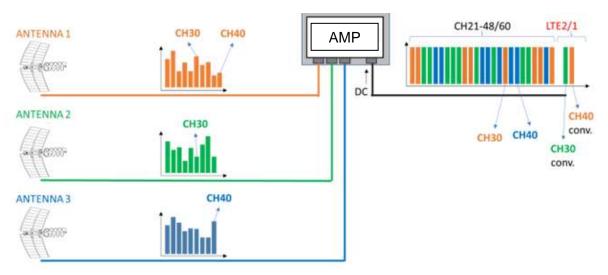
Example 2. CH40 < CH40 → CH40 is filtered → CH40 is passed



#### ON: Weakest duplicate channel is converted to LTE band.

Example 1. CH30 > CH30 → CH30 is passed → CH30 is converted to LTE band

Example 2. CH40 < CH40 → CH40 is converted to LTE band AND → CH40 is passed



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