



EKSELANS BY ITS



DIGITAL PROGRAMMABLE AMPLIFIERS

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TECHNOLOGICAL
EXCELLENCE



ENTER THE EK WORLD

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DIGITAL PROGRAMMABLE AMPLIFIERS

EK presents the new range of EKSEL programmable exchanges developed with the most **modern digital filtering technology**.

EKSEL models incorporate **32 ultra-selective digital filters that allow the selection**, filtering and amplification of each digital multiplex, guaranteeing the **ideal output level** for each type of installation - whether individual or collective - and a very high quality output.

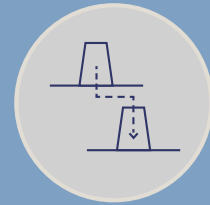
The control units also incorporate an **automatic search system** for fast and efficient **self-programming** of the DTT multiplexes of the UHF inputs.

The EKSEL range complies with the requirements for header equipment required by the Common Telecommunications Infrastructure **Regulatory Regulation (ICT2) for access to telecommunication services inside buildings**, approved by Royal Decree 346/2011 of March 11, since it incorporates very high selectivity filters that allow to guarantee a difference less than 3dB between channels of the same band.

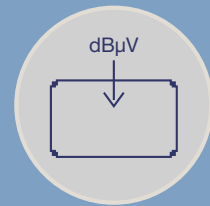
EKSEL programmable control panels:
the perfect solution for the **Second Digital Dividend**



AUTOMATIC PROGRAMMING
+
AUTO SEARCH OF DTT MUXES



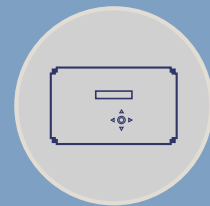
CHANNEL CONVERSION



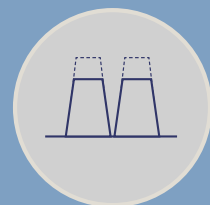
INPUT LEVEL MEASUREMENT



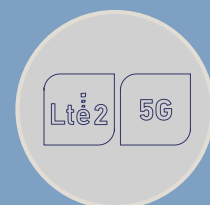
AUTOMATIC GAIN CONTROL



PROGRAMMING WITH DISPLAY
+
JOYSTICK



HIGH SELECTIVITY



COMPATIBLE SECOND DIVIDEND

PROGRAMMABLE AMPLIFIERS

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EKSEL 432

- 4 inputs (2 x UHF, 1 x FM, 1 x DAB / VHF-UHF selectable)
- 2 outputs (TER / TEST -30dB)
- 32 ultra-selective digital filters
- Gain > 55dB
- Output level 120dBuV (45004B) / 131dBuV (IMD3-36dB)
- Automatic digital multiplex search
- Programming with joystick and display. Simple navigation through the menu
- Processing functionality for channel conversion
- Measurement of the digital multiplex input level
- Automatic real-time gain control
- Automatic detection of the necessary filter LTE1 (4G) / LTE2 (5G)
- Preamp Power Option
- USB 2.0 / 3.0 for dump configurations
- Easy access internal power supply



REFERENCE	EKSEL 432		
Code	071011		
	UHF	FM	DAB/ VHF/ UHF
Inputs	2	1	1
Frequency range	470 MHz – 862MHz	88-108 MHz	195-223MHz
Max. gain	>55dB	35dB	>55dB
Number of filters	32*	-	32*
Filter channels	1	-	1
Equalizer	0..6	-	0..6
Atenuation control	0...20dB+AGC	0...20dB	0...20dB+AGC
Max. input level	110dBμV	-	110dBμV
Max. output level (DIN45004B)	120dBμV		
Max. output level (EN50083 IMD3 2CH -36dB)	128-131dBμV**		
Noise figure	-	<6dB	-
Isolation	>35dB@+/- 1MHz	>20dB@+/- 20MHz	>35dB@+/- 1MHz
Preamp Feeding	12V/24V/OFF	-	-
Max. power consumption preamplifier	***	-	-
Power supply	100-254 V/ 50 - 60 Hz		
Energy consumption	<20W		
Operational temperature range	0...50°C		
USB Port	USB 2.0/3.0 tipo A		
Screen	2 lines, 16 characters		
Connector type	F		
RF output	TER / TEST -30dB		

* Number of filters for UHF inputs. If the DAB input is selected, 6 filters will be assigned to this band and 26 to the UHF inputs

PROGRAMMABLE AMPLIFIERS

EKSEL 432 ICT

REFERENCE	EKSEL 432 ICT			
Code	071012			
	UHF	DAB/ VHF/ UHF	FM	SAT
Inputs	2	1	1	1
Frequency range	470 – 862 MHz	195-223 MHz	88-108 MHz	950-2150 MHz
Max. gain	>55dB	>55dB	35dB	40dB
Number of filters	32	32*	-	-
Filter channels	1	1	-	-
Equalizer	0...6	0...6	-	0...9
Attenuation control	0...20dB	0...20dB	0...20dB	0...20dB
Max. input level	110dBμV	110dBμV	-	-
Max. output level (DIN45004B)	116dBμV (UHF/VHF); > 119 dBμV SAT (35 dB)			
Max. output level (EN50083 IMD3 2CH -36dB)	>131dBμV (terrestrial)			
Noise figure	-	-	<6dB	<8dB
Isolation	>35dB@ +/-1MHz	>35dB@ +/-1MHz	>20dB@ +/-20MHz	>40dB(5-862MHz)
Preamp Feeding	12V/24V/OFF		-	13V/17V, 22kHz
Max. power consumption preamplifier	***		-	300mA
Power supply	100-254 V/ 50 - 60 Hz			
Energy consumption	<25W			
Operational temperature range	0...50°C			
USB Port	USB 2.0/3.0 tipo A			
Screen	2 lines, 16 characters			
Connector type	F			
RF output	SAT+ TER/ TER/ TEST -30dB			

* Number of filters for UHF inputs. If the DAB input is selected, 6 filters will be assigned to this band and 26 to the UHF inputs

- 5 inputs (2 x UHF, 1 x FM, 1 x DAB / VHF-UHF selectable, 1 x SAT)
- 3 outputs (TER / TER + SAT / TEST -30dB)
- 32 ultra-selective digital filters
- Gain> 55dB (DTT) / 40dB (SAT)
- DTT output level 118dBμV (45004B) / 129dBμV (IMD3-36dB)
- SAT 119dBμV output level (IMD-35dB)
- Automatic digital multiplex search
- Programming with joystick and display. Simple navigation through the menu
- Processing functionality for channel conversion
- Measurement of the digital multiplex input level
- Automatic real-time gain control
- Automatic detection of the necessary filter LTE1 (4G) / LTE2 (5G)
- Preamp Power Option
- USB 2.0 / 3.0 for dump configurations
- Easy access internal power supply



PROGRAMMABLE AMPLIFIERS

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EKSEL 632

- 6 inputs (3 x UHF-VHF selectable, 1 x FM, 1 x DAB / VHF-UHF selectable, 1 x AUX)
- 2 outputs (TER / TEST -30dB)
- 32 ultra-selective digital filters
- Gain > 55dB
- Output level 123dBuV (45004B) / 134dBuV (IMD3-36dB)
- Automatic digital multiplex search
- Programming with joystick and display. Simple navigation through the menu
- Processing functionality for channel conversion
- Measurement of the digital multiplex input level
- Automatic real-time gain control
- Automatic detection of the necessary filter LTE1 (4G) / LTE2 (5G)
- Preamp Power Option
- USB 2.0 / 3.0 for dump configurations
- Easy access internal power supply



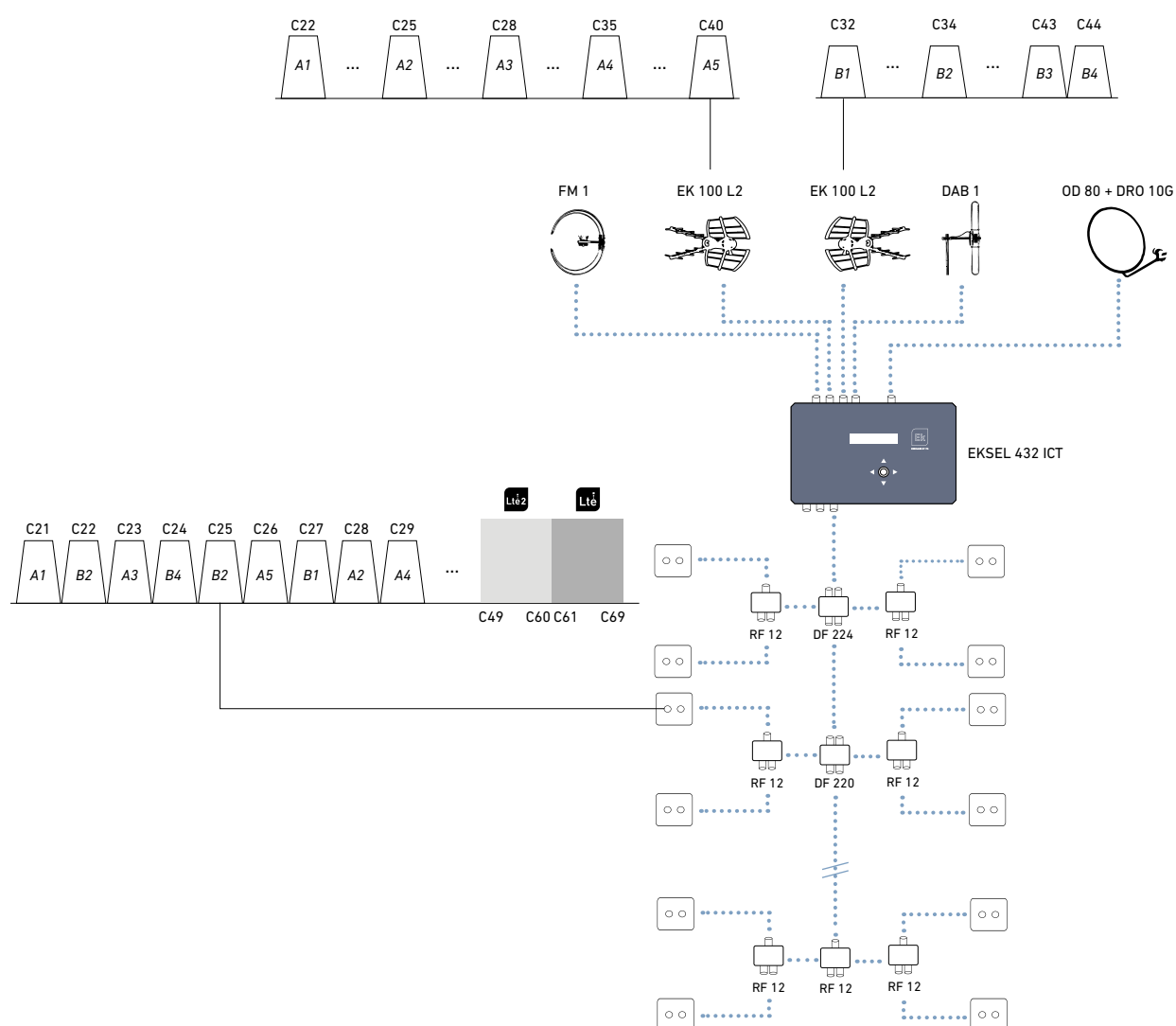
REFERENCE	EKSEL 632			
Code	071013			
	UHF/ VHF	FM	AUX - option	DAB/ VHF/ UHF
Inputs	3	1	1	1
Frequency range	174 – 862 MHz	88-108 MHz	47-862 MHz	195-223 MHz
Max. gain	>55dB	35dB	20dB	>55dB
Number of filters	32*	-	-	32*
Filter channels	1	-	-	1*
Equalizer	0...6	-	-	0...6
Attenuation control	0...20dB	0...20dB	0...20dB	0...20dB
Max. input level	110dBμV	-	110dBμV	110dBμV
Max. output level (DIN45004B)	>123dBμV (terrestrial; 60 dB)			
Max. output level (EN50083 IMD3 2CH -36dB)	>134dBμV (terrestrial)			
Noise figure	-	<6dB	<6dB**	-
Isolation	>35dB@ +/-1MHz	>20dB@ +/-20MHz	>30dB	>35dB@ +/-1MHz
Preamp Feeding	12V/24V/ OFF	-	-	
Max. power consumption preamplifier	***	-	-	***
Power supply	100-254 V/ 50 - 60 Hz			
Energy consumption	<25W TERR**			
Operational temperature range	0...50°C			
USB Port	USB 2.0/3.0 tipo A			
Screen	2 lines, 16 characters			
Connector type	F			
RF output	TERR/ TEST -30dB			

* Number of filters for UHF inputs. If the DAB input is selected, 6 filters will be assigned to this band and 26 to the UHF inputs

APPLICATION EXAMPLE 1

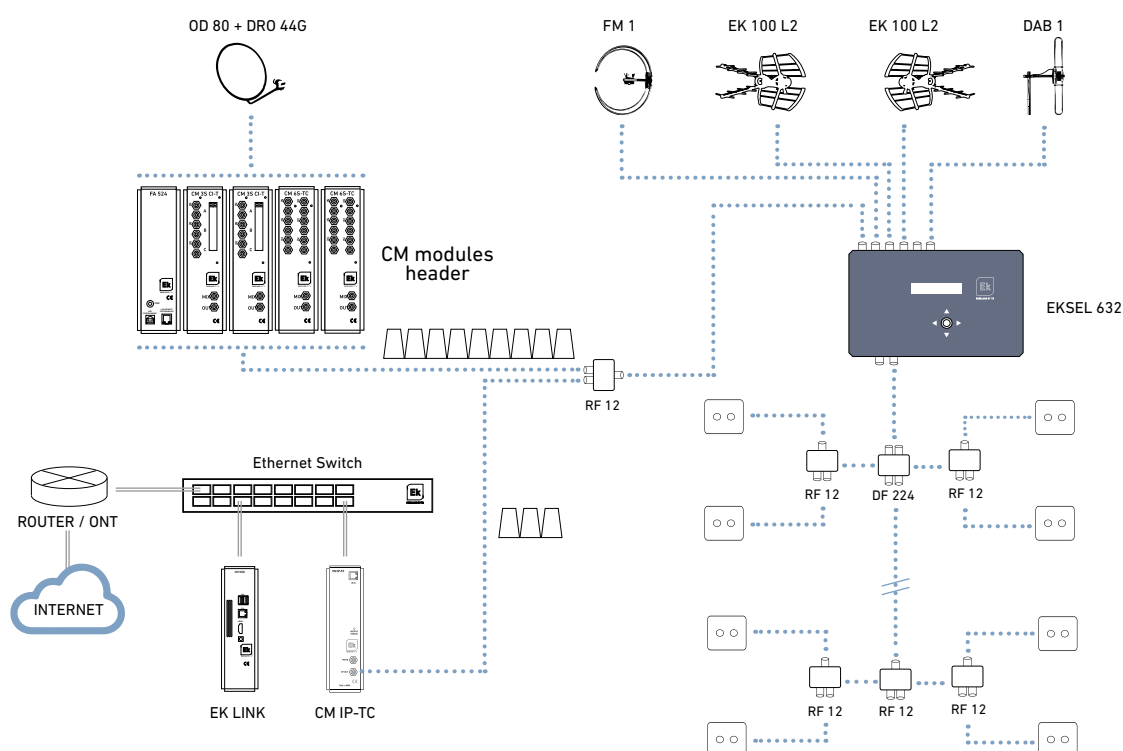
In this installation, 5 and 4 channels are received from two different transmitters, with evident differences in level between both receptions and slight differences between the channels received from each transmitter.

Thanks to the ultra-selective digital filters, it is possible to move all received channels to start at the beginning of the band and completely equalized before being distributed.



APPLICATION EXAMPLE 2

This installation example illustrates the ability of the programmable control unit to process and order a large number of channels from all its inputs, amplify them and provide a good output level to be able to inject signal to the entire installation.





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ITS Partner O.B.S. S.L

Av. Cerdanyola 79-81 Local C

08172 Sant Cugat del Vallès

Barcelona (España)

Tel: +34 93 583 95 43

info@ek.plus

www.ek.plus