

Digital Pre-/Post-Selectors R&S®FK2020, R&S®FK2040

Embedded, automatically tuned tracking pre-/post-selectors, up to 40 dB selectivity

The automatically tuned tracking selectors incorporate the following functions:

- Seven-pole lowpass

 (0 Hz to approx. 30 MHz) for
 suppressing interference <30 MHz
- Five-pole lowpass (0 Hz to 1.5 MHz) for suppressing strongly interfering shortwave signals
- Single-tuned tracking filter
 (1.5 MHz to 30 MHz) with stopband attenuation of up to 40 dB at 10% offset (R&S®FK2040)
- Automatic tracking either in reception or transmission mode
- Remote control on/off (can be bypassed)
- Input voltage protection up to 200 V EMF

The Digital Pre-/Post-Selectors
R&S®FK20xx are plug-in modules and
can be retrofitted into the R&S®XK2100L,
R&S®GX2900L and R&S®EK2000 transceivers/receivers

The Selector R&S®FK2020 is already prepared for a later upgrade to 40 dB selectivity.



The use of the Digital Pre-/Post-Selectors R&S®FK 20xx is recommended in strongly disturbed RF environments, i.e. for collocation problems such as they occur on board ships.

With digitally tuned filters the R&S®FK20xx selectors improve the receiver input selectivity and the phase noise at the transmitter (>170 dB (1 Hz) and reduce harmonics and spurious.

The bidirectional function in R&S®XK2000 transceivers coupled with very short tuning times (<10 ms) also allows frequency-agile operation.

Specifications

	R&S®FK2020	R&S®FK2040	
Frequency range	0 Hz to 30 MHz at f <1.5 MHz lowpass function	0 Hz to 30 MHz at f <1.5 MHz lowpass function	
Stopband attenuation	>20 dB at 10% offset from operating frequency	>40 dB at 10% offset from operating frequency	
Gain	0 dB to +2 dB	-2 dB to+2 dB	
Inband TOI	>34 dBm	>30 dBm	
Tuning time	<10 ms	<10 ms	
Input voltage protection	200 V EMF max. (with $Z_{in} = 50 \ \Omega$)	200 V EMF max. (with $Z_{in} = 50 \ \Omega$)	
Threshold level for protection circuit	approx. >10 V EMF or RF current >4 A	>10 V EMF or RF current >4 A	

Ordering information

Digital Pre-/Post-Selectors			
20 dB selectivity, can be upgraded to 40 dB	R&S®FK2020	6096.9502.02	
Upgrade Kit R&S®FK2020 to R&S®FK2040	R&S®FK2020	6096.9502.03	
40 dB selectivity	R&S®FK2040	6096.9902.02	

More information at www.rohde-schwarz.com (search term: FK 2020, FK 2040)







