SDR FILTER UNIT

- **SOFTWARE DEFINED RADIO ARCHITECTURE**
- **PROGRAMMABLE FILTER CHARACTERISTICS**
- **16 BITS ADC AND DAC**
- **HIGH SIGNAL QUALITY**
- **CUSTOM FUNCIONS ARE AVAILABLE UPON REQUEST**

The BUFI10 is a digital signal processing unit mainly designed for channel and band selective filtering in repeaters or other communication equipment. It has software defined radio architecture (SDR) which means that the filter characteristics can be changed easily by software commands or many additional signal processing functions can be integragrated just by internal software change. The main signal processor is a high performance FPGA which can do various signal processing mixing, channel filtering, automatic level control, channel muting, etc. All function can be adjusted in real time by software. Any filter characteristics can be downloaded into internal filter bank.

Electrical characteristics:

Frequency range	DC-200 MHz (depending on request)
Nominal frequency range	110-140 MHz
Input bandwidth	max. 30 MHz
Channel bandwidth	0.01-5 MHz
Number of channels	< 8 (depending on bandwidth)
Nominal input level	0 dBm
Nominal output level	-10 dBm
Spurious level	< -70 dBc
AAF and AIF	internal
Frequency resolution	< 1 Hz
Frequency reference	internal
ADC resolution	16 bits
DAC resolution	16 bits
Data interface	RS-232
Data connector	DSUB-9 male
RF connectors	SMA female
Supply voltage	+12V DC
Supply current	< 1 A
Power supply connector	solder pin
Operating Temp. Range	-40…+85 °C
Mechanical Size	approx. 100 x 150 x 25 mm
Weigth	approx. 420 g

Outline dimensions (mm):

138,8

144,8

87

93

M3x8
4x

21,5