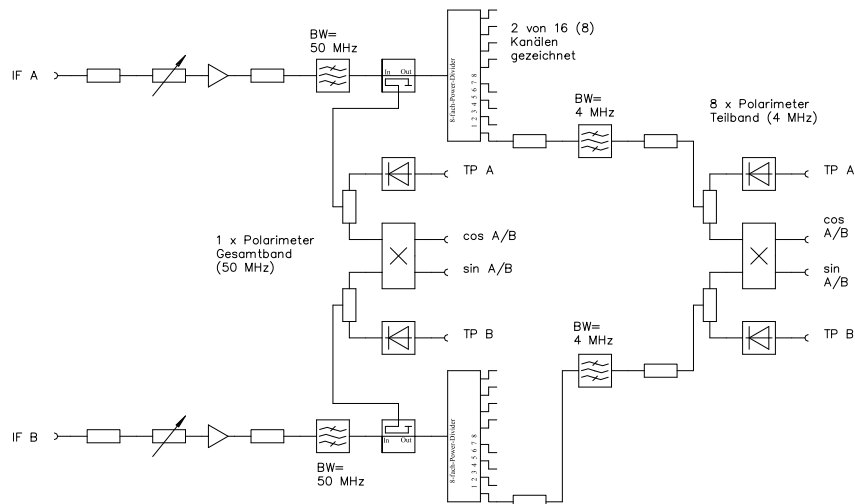


## 8-Bank-Polarimeter

There are two 8-bank polarimeters available at Effelsberg; one for the 18/21cm-receiver (alternatively, it could be connected to the 21cm-7Beam system, both are prime focus systems), the other for the 11cm-receiver (located in the secondary focus). These can be used to split the full IF band into eight subbands and investigate the polarization properties of the signal separately (eg., for Rotation Measure studies).



8-Kanal-Filter-Polarimeter S 236: Block-Schaltbild

Besides the eight subbands, there is also a polarimeter for the full bandwidth. As each polarimeter has four outputs, there are 36 channels in total.

For the data analysis the standard procedures can be applied – they just have to be repeated 9 times!

The table below summarizes the frequency distribution and channel assignment of the subbands for the 18/21cm- and the 11cm-receivers.

18/21cm-Receiver Centre Frequency 1.400 GHz		11cm-Receiver Centre Frequency 2.6395 GHz	
Frequency of Subband	Channels	Output	Frequency of Subband
1386 ± 2 MHz	1	TP A	2604.5 ± 5 MHz
	2	TP B	
	3	Cos A/B	
	4	Sin A/B	
1390 ± 2 MHz	5-8	...	2614.5 ± 5 MHz
1394 ± 2 MHz	9-12	...	2624.5 ± 5 MHz
1398 ± 2 MHz	13-16	...	2634.5 ± 5 MHz
1402 ± 2 MHz	17-20	...	2644.5 ± 5 MHz
1406 ± 2 MHz	21-24	...	2654.5 ± 5 MHz
1410 ± 2 MHz	25-28	...	2664.5 ± 5 MHz
1414 ± 2 MHz	29-32	...	2674.5 ± 5 MHz
Full band			
1400 ± 16 MHz	33-36	...	2639.5 ± 40 MHz