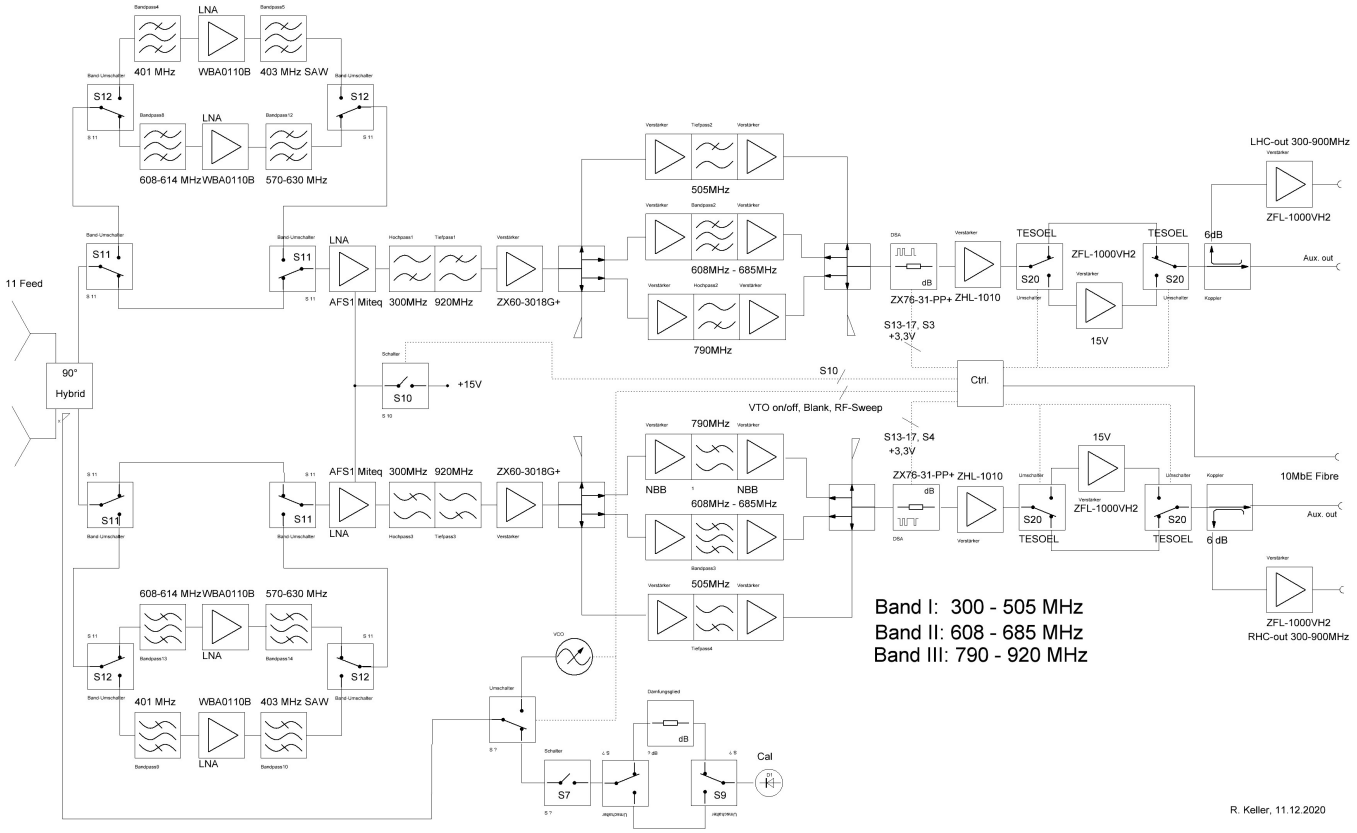
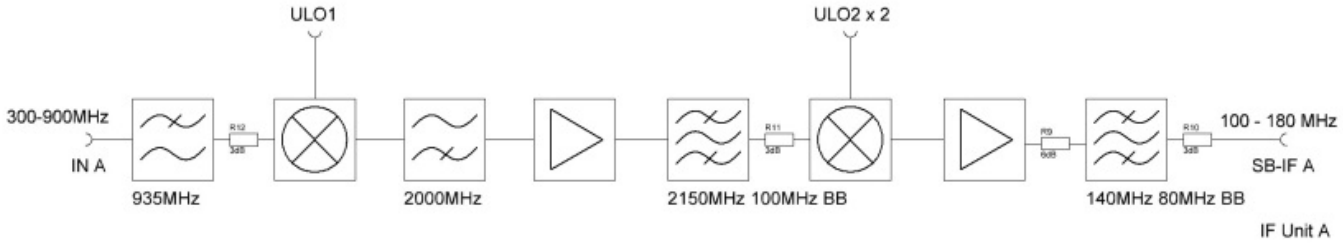
Technical Documentation of 50cm 300-900 MHz (P500)

Type	HEMT LNA, unclooled
Channel	2
Tsys	300K(Trec~150K
RF Frequency Range	300-900 MHz
Band Width RF Filter	300 - 505 MHz
1. Local Oscillator	ULO1 = 1250-1850 MHz
1. IF	2100 - 2200 MHz
2. Lcal Oscillator	ULO2 = 1998MHz fixed
2. IF	100 - 200 MHz
→	608 - 685 MHz
→	790 - 915 MHz)
Polarization	LHC and RHC
Calibration	Noise Diode
Feed	11-Feed from DRAO
Output	300 - 900 MHz

Block Diagram





Comments

> This receiver is a straight forward 300 MHz to 900 MHz receiver with no down conversion. Due to intensive RFI in this broad frequency band three filter bands are installed to prevent the system from sturation by the strongest interferer. Nevertheless there is much more RFI in the band that has to be filtered in the backend. For a dedicated project a switchable RF filter plus LNA has been inserted. The filter has a bandwidth of 7 MHz and its frequency is fixed from 399 to 406 MHz. For continuum measurements an analogue filtering down converter module to an IF of 100 MHz to 180 MHz for both channels is available:

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