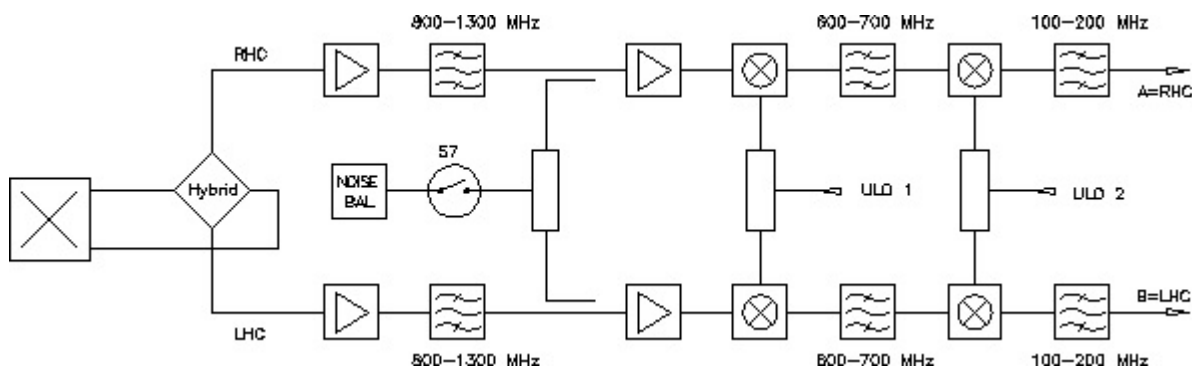


Technical Documentation of the 30cm Receiver 800- 1300 MHz (P300mm)

Type	HEMT ,Cooled	
Channels	2	
Receiver Noise Temperature	50 K - 95K (see table)	
Frequency Range	0.8 - 1.3 GHz	
Bandwidth RF-Filters-fixed	0.8 - 1.3 GHz	
Polarization	LHC and RHC	
Calibration	Noise Diode after 1. Amplifier	
feed	Dipole System	
1. Oscillator		ULO1
1. IF	600-700 MHz	
2. Oscillator		ULO2
2. IF	100 - 200 MHz	

Block Diagram



Receiver Noise Temperature

Frequency [MHz]	T _{Rec,RHC} [K]	T _{Rec,LHC} [K]	T _{Cal,RHC} [K]	T _{Cal,LHC} [K]
863	65	63	15.0	13.7
1022	50	51	13.1	11.4
1135	57	57	12.9	11.3
1222	61	62	12.9	12.0
1300	95	94	16.1	15.3

Commenets


The noise measurements were made in the laboratory with 2 MHz bandwidth and refer to the feed.

This system was constructed particularly for VLBI, but was already used during test measurements also for spectroscopy, continuum and pulsar observations. This frequency range is not free of interference. Observers wanting to do continuum or pulsar observations might have to search for a frequency range not obstructed by interference and/or use a narrower bandwidth.

This system is part of Primary Focus Multi Frequency Box #2 (PM2).

Last
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