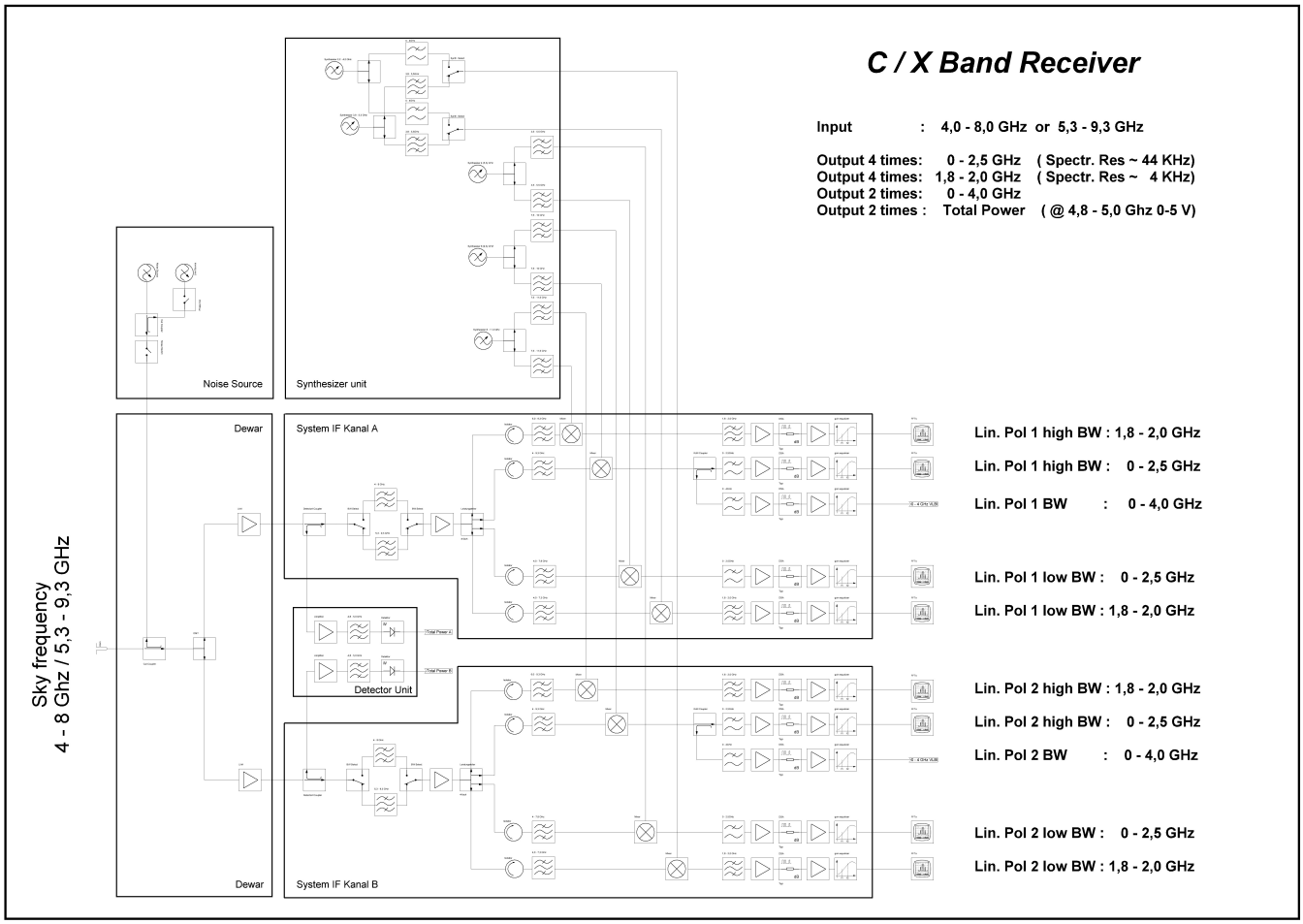
Technical Documentation of the C/X-Band Receiver 4 - 9.3 GHz (S45mm)

Type	HEMT cooled		
Channels	8	upper/lower broad- and narrowband of 2 polarizations	
Receiver Noise	20K		
Frequency range	4 GHz - 9.3 GHz	4 - 8 GHz (C-Band) / 5.3 - 9.3 GHz (X-Band)	
Polarization	LHC/RHC	single horn	
Calibration	Noise diode	5 MHz phase cal	
IF lower band	0 - 4 GHz	0 - 2.5 GHz	1,8 - 2.0 GHz
IF upper band		0 -2.5 GHZ	1,8 - 2.0 GHz
Synthesizer frequency for fsky at center of:	*4 GHz IF*	*2.5 GHz IF*	*200 MHz IF*
Highband (Ch.1, 2, 5, 6):	fsynth.4 = 8.0/9.3GHz	fsynth.4 = 8.0/9.3GHz	fsynth.5 = fsky + 1.9GHz
Lowband (Ch.3, 4, 7, 8):		fsynth.3 = 4.0/5.3GHz	fsynth.1/2 = fsky - 1.9GHz (1: fsky = 4 - 6 GHz / 2: fsky = 5.9 - 7.3 GHz



Simplified Block Diagram of the complete receiver, (CK on 30.1.2018)

Block Diagram of the IF conversions, (CK on 30.1.2018)

Block Diagram of the calibration unit, (CK on 30.1.2018)

Block Diagram of the total power detector unit, (CK on 30.1.2018)

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