

# 4.5cm broad band C/X secondary focus receiver (4000-9300 MHz)

This is a broad-band receiver with two orthogonal linear polarizations (at a 45°-angle with the horizon). The system is still under test, but could be used on a "shared-risk" basis.

## Calibration Information

Frequency [GHz]	Channel	Polarisation	Tcal [K]	Tsys [K]	Sensitivity [K/Jy]	SEFD [Jy]	Aperture Eff. [%]	TMB/S [K/Jy]	Main Beam Eff. [%]	FWHM [arcsec]	Last update
6.668	1	lin	4.5	27	1.54	17	54	2.2	63	102	Nov 2016
6.668	2	lin	4.1	28	1.54	18	54	2.2	63	102	Nov 2016
normalized Gain curve ( $G = A0 + A1 \cdot Elv + A2 \cdot Elv^2$ )							Observed in	confirmed			
A0 = 0.9928		A1 = 4.212E-4		A2 = -6.158E-6		Jun 2016					

## Comments:

- The gain curve was corrected for opacity (though it is small, < 0.02 throughout the band).

## Version description for OBSINP

## Channel assignment in the MBFITS data files

## Tcal and Tsys measurements

From:  
<https://eff100mwiki.mpifr-bonn.mpg.de/> - Effelsberg 100m Teleskop

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