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 receiver delivers 4 basebands (each with two polarizations):

Baseband	Center Frequency	Bandwidth
1	5.250 GHz	2500 MHz
2	6.750 GHz	2500 MHz
3	6.668 GHz	200 MHz
4	4.829 GHz	200 MHz

Calibration Information

Frequency [GHz]	Channel	Polarisation	Tcal [K]	Tsys [K]	Sensitivity [K/Jy]	SEFD [Jy]	Aperture Eff. [%]		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 Gai	n curve ($G = A0 +$	$A1 \cdot Elv + A2 \cdot Elv2)$	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

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

https://eff100mwiki.mpifr-bonn.mpg.de/doku.php?id=information for astronomers:rx:s45mm&rev=157061171

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