

5-cm primary focus receiver (5750-6750 MHz)

This is a 2-channel system mostly used for spectroscopy and (spectral line-) VLBI. Channel A has a slightly higher Tsys than B.

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
6.032	A	LCP	3.6	40	1.5	26	53	1.9	79	132	Jul 2008
6.032	B	RCP	3.4	32	1.5	20	53	1.9	79	132	Jul 2008
6.140	A	LCP	3.1	37	1.5	24	53	1.9	78	129	Jul 2008
6.140	B	RCP	3.2	30	1.5	23	53	1.9	78	129	Jul 2008
6.650	A	LCP	2.8	39	1.5	26	53	1.9	78	121	Jul 2008
6.650	B	RCP	2.9	33	1.5	24	53	1.9	78	121	Jul 2008
normalized Gain curve (G = A0 + A1·Elv + A2·Elv2)							Observed in		confirmed		
A0=0.96098		A1=1.5518E-3		A2=-1.5381E-5		Jul 2008					

Comments:

- None

Version description for OBSINP

RX Name	Wavelength [cm]	Frequency (center) [GHz]	Nr. of Horns
P50mm 4-Box (5,75-6,75 GHz)	5.0	5.75-6.75 (6.25)	1
Version:	Comment		
1. Cont./Line (BW: 100 MHz)	Continuum and spectroscopy version		
2. 10dB Atten. Cont./Line (BW: 100 MHz)	Continuum and spectroscopy version for very bright maser sources		
3. Cont. (BW: 1 GHz)	Broad band Continuum		
4. Line (BW: 500 MHz)	VLBA IF spectroscopy/VLBI version		
Horn offsets [arcsec]	-690.6, 421.5		

Channel assignment in the MBFITS data files

Note that the narrow line and VLBA IF channels are usually only available when the specific line

version of the receiver was selected. In addition for most receivers with narrow line channels the cables at the patch board need to be connected by the receiver group.

To select different channel numbers in OBSINP, the online plot, or the toolbox the numbers have to be specified like c(1)+c(2) to add channel 1 and 2. E.g. channel 1 and 2 contain the LCP and RCP broadband channels, then "OnlPlot pen='c(1)+c(2)'" or "toolbox use='c(1)+c(2)'" will select these channels. In OBSINP the pen can be directly specified in the receiver selection menu.

Abbreviations:

SB: narrow band channel (Schmalband-Kanal), 100 MHz band width

BB: digital broad band channel (Breitband-Kanal), band width varies for different receivers

VLBA: VLBA IF, 500 MHz band width

optical: optical fibre with 4 GHz of band width

BW: band width

TP: total power

5.0cm PFK (Multi-RX-Box II)			
Channel	IF	Pol.	Comment
1	SB	LCP	TP A
2	SB	RCP	TP B

Tcal and Tsys measurements



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