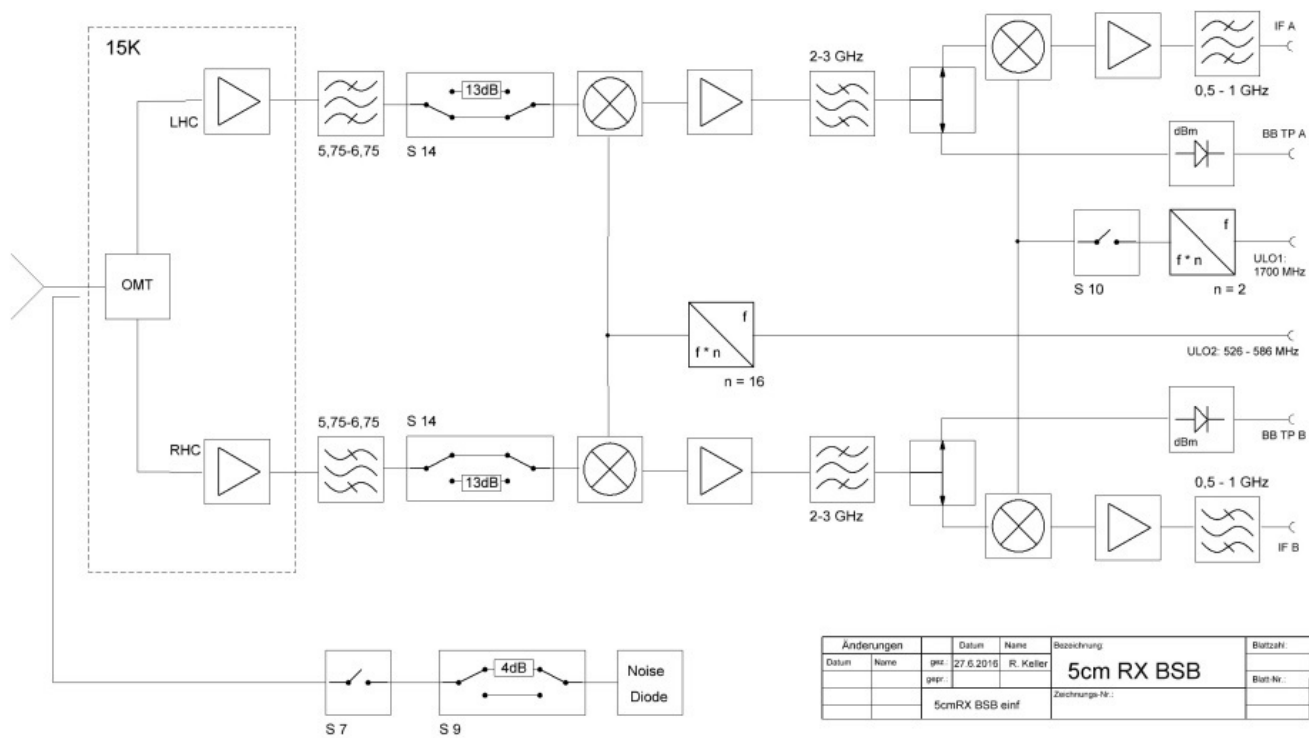


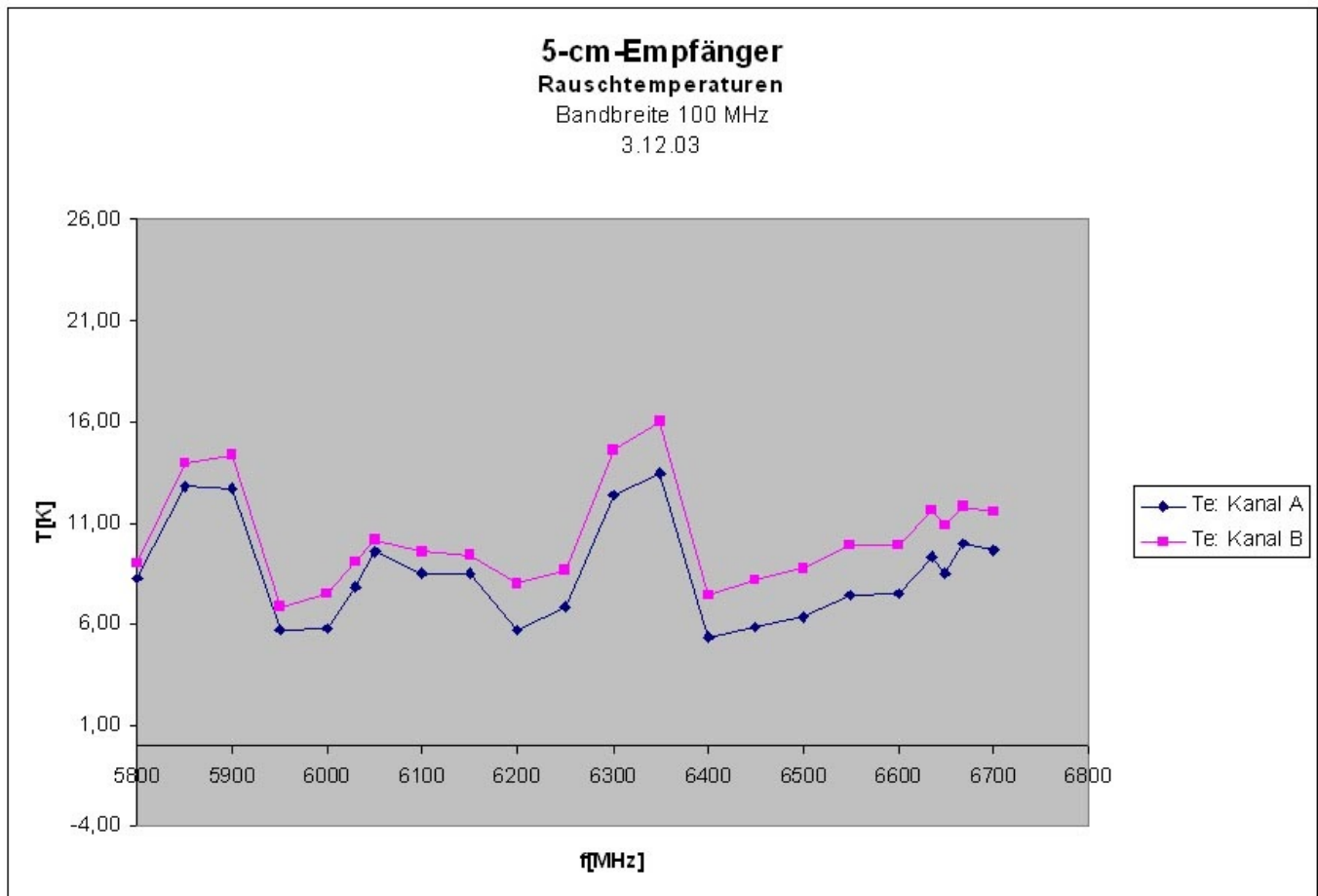
# Technical Documentation of the 90mm Receiver 3.2 - 3.6 GHz (P90mm)

|                            |                                            |                    |
|----------------------------|--------------------------------------------|--------------------|
| Type                       | HEMT Cooled                                |                    |
| Channels                   | 1                                          |                    |
| Receiver Noise Temperature | 30K                                        |                    |
| Frequency Range            | 2.86 GHz - 3.14 GHz and 3.29 GHz - 3.6 GHz |                    |
| Bandwidth RF-Filters-fixed | 1 GHz                                      |                    |
| Polarization               | linear                                     |                    |
| Calibration                | Noise Diode                                |                    |
| 1. IF                      | 100 - 200 MHz                              |                    |
| 1. Oscillator              | ULOx4                                      | USB: 690 - 735 MHz |
|                            |                                            | LSB: 860 - 925 MHz |

## Block Diagram



## Receiver Noise Temperature



## Comments

This two-channel system with cooled HEMT pre-amplifiers has been designed for spectroscopy and VLBI observations.

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

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

Permanent link:  
[https://eff100mwiki.mpifr-bonn.mpg.de/doku.php?id=electronics:rx:techinfo:documentation\\_p90mm&rev=1576575345](https://eff100mwiki.mpifr-bonn.mpg.de/doku.php?id=electronics:rx:techinfo:documentation_p90mm&rev=1576575345)

Last update: **2019/12/17 10:35**