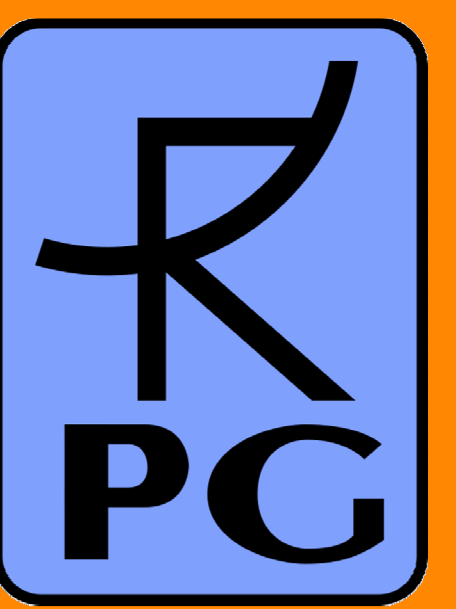
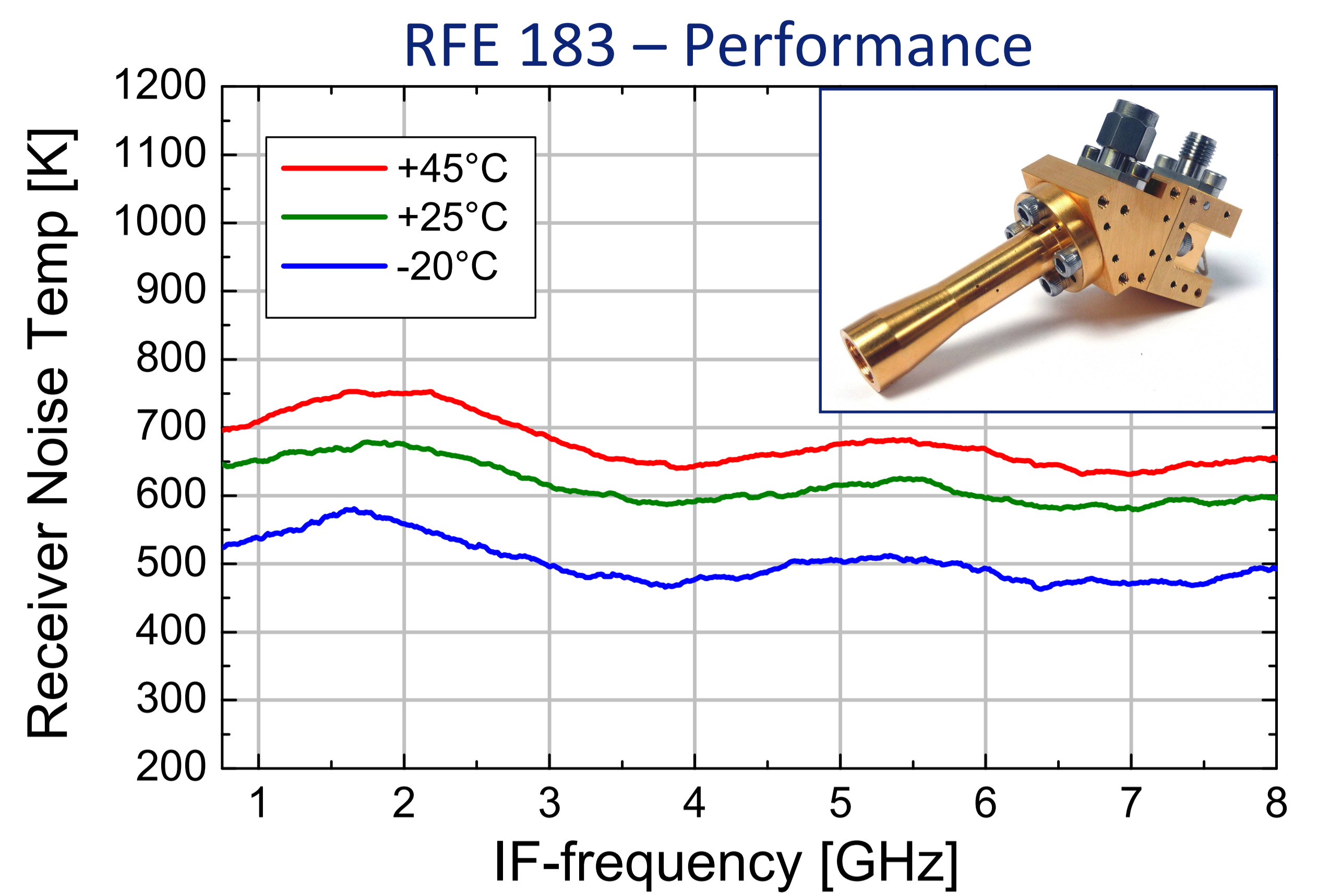
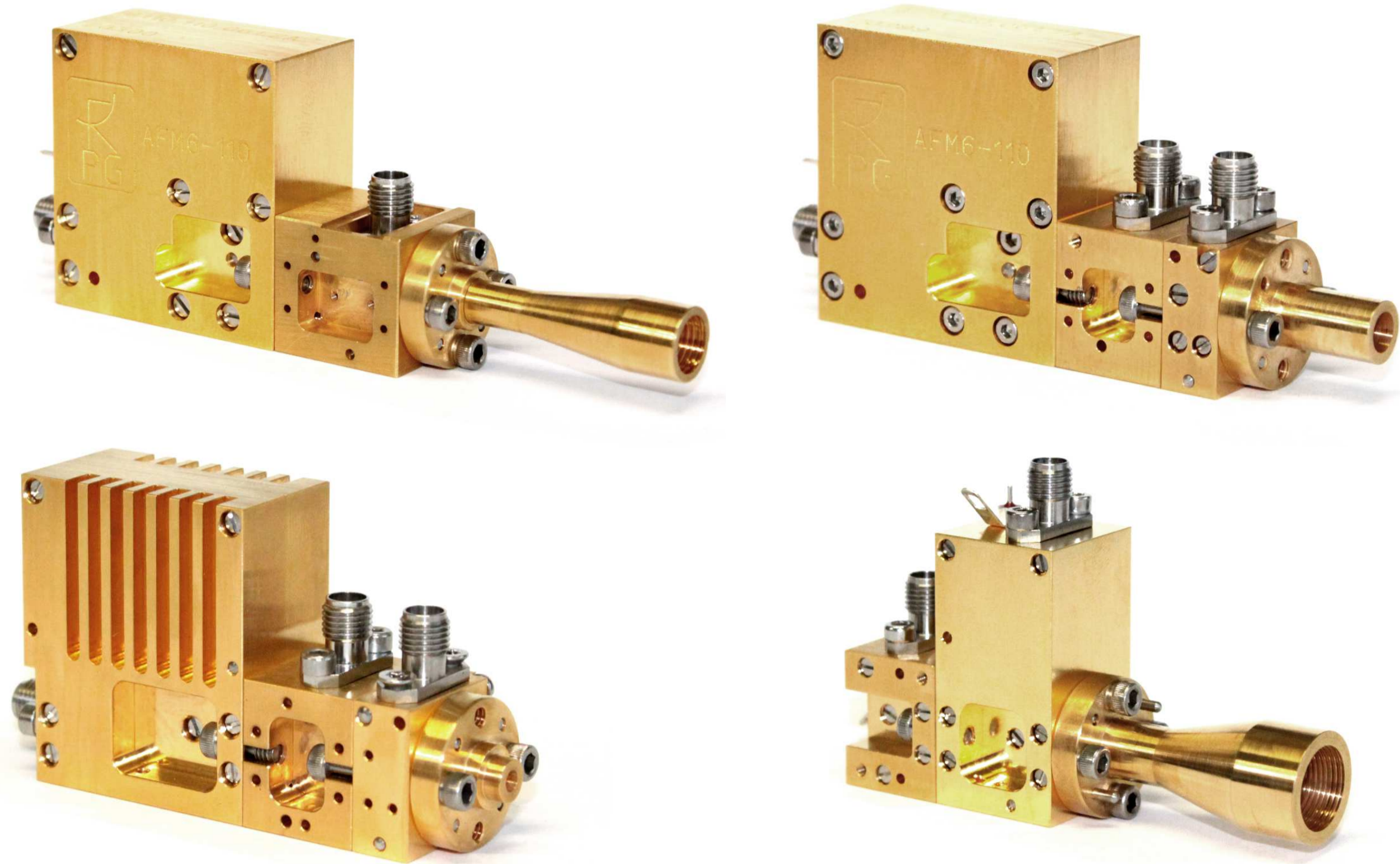


# Radiometer-Physics GmbH

Submm Receiver Technology for Microwave Imaging/Sounding

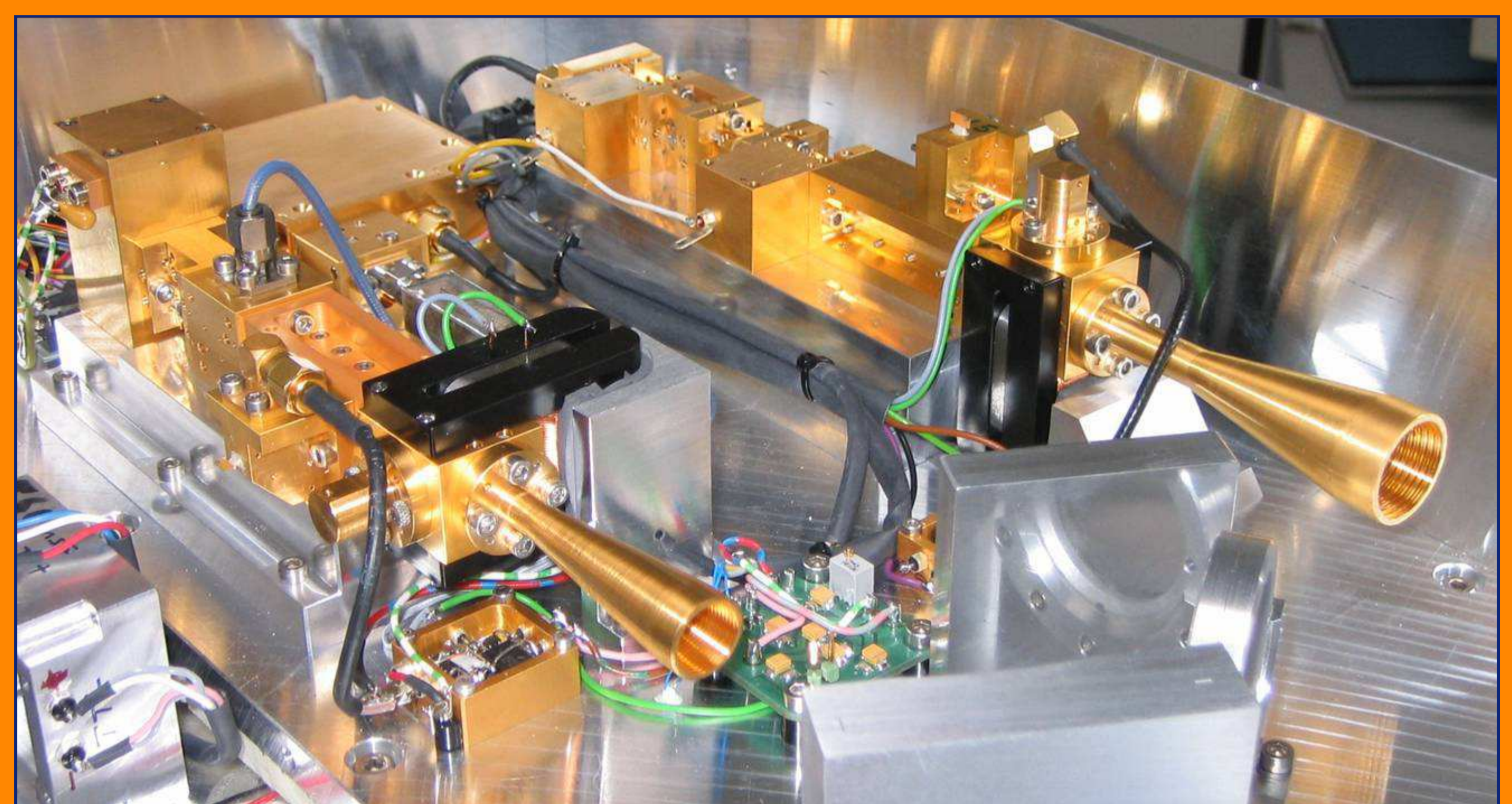


## MWS/ICI Receivers (incl. LO)

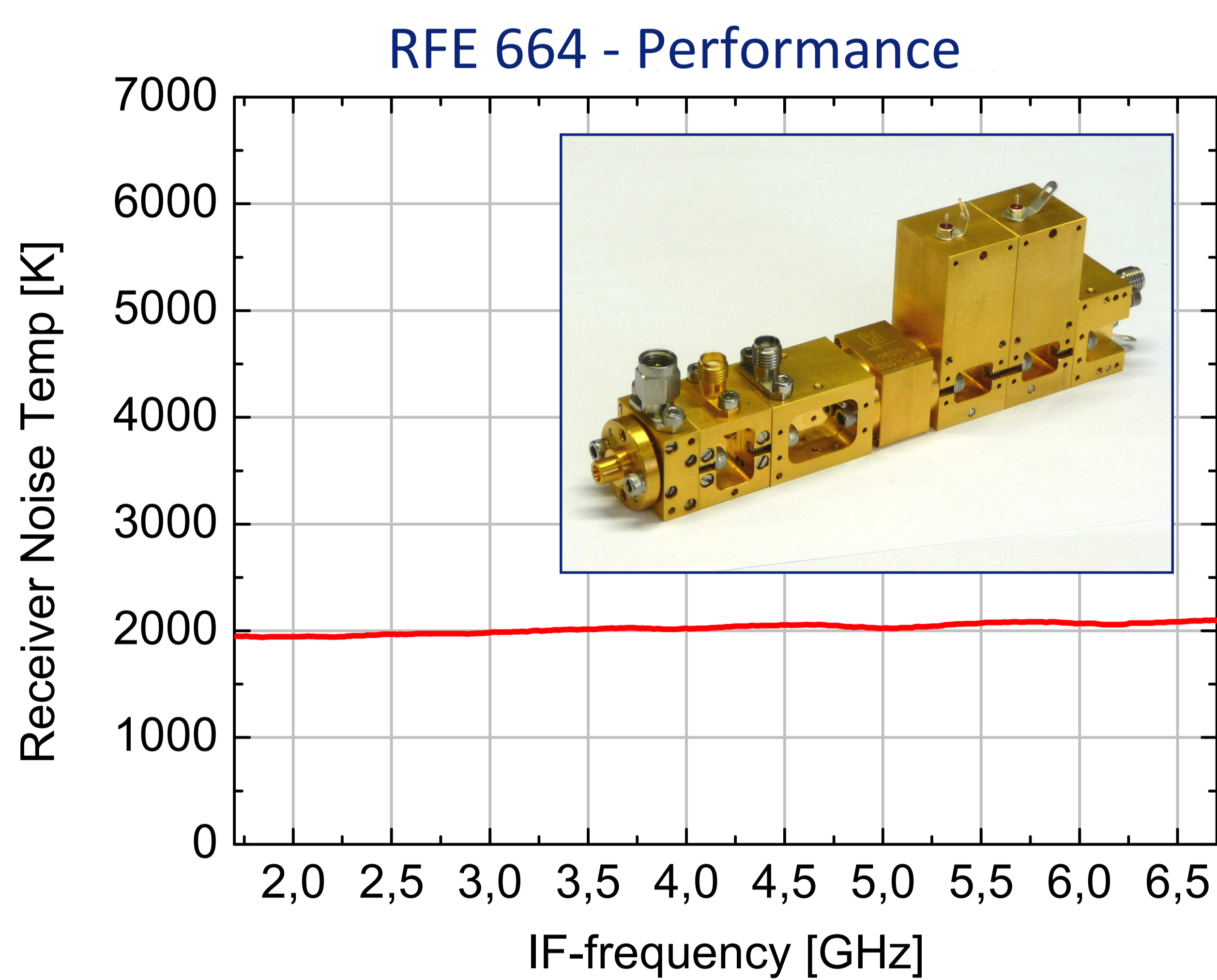


## Leader in Technology:

- Up to 120 GHz: Direct Detection, LNA
- Up to 200 GHz: 4 point calibration (noise injection + switched isolator)
- Corrugated feeds: 1.2 THz
- Other feeds: 2.8 THz
- TX/RX up to 1 THz
- VNA Extender at 750 GHz and beyond (amplitude + phase measurement)

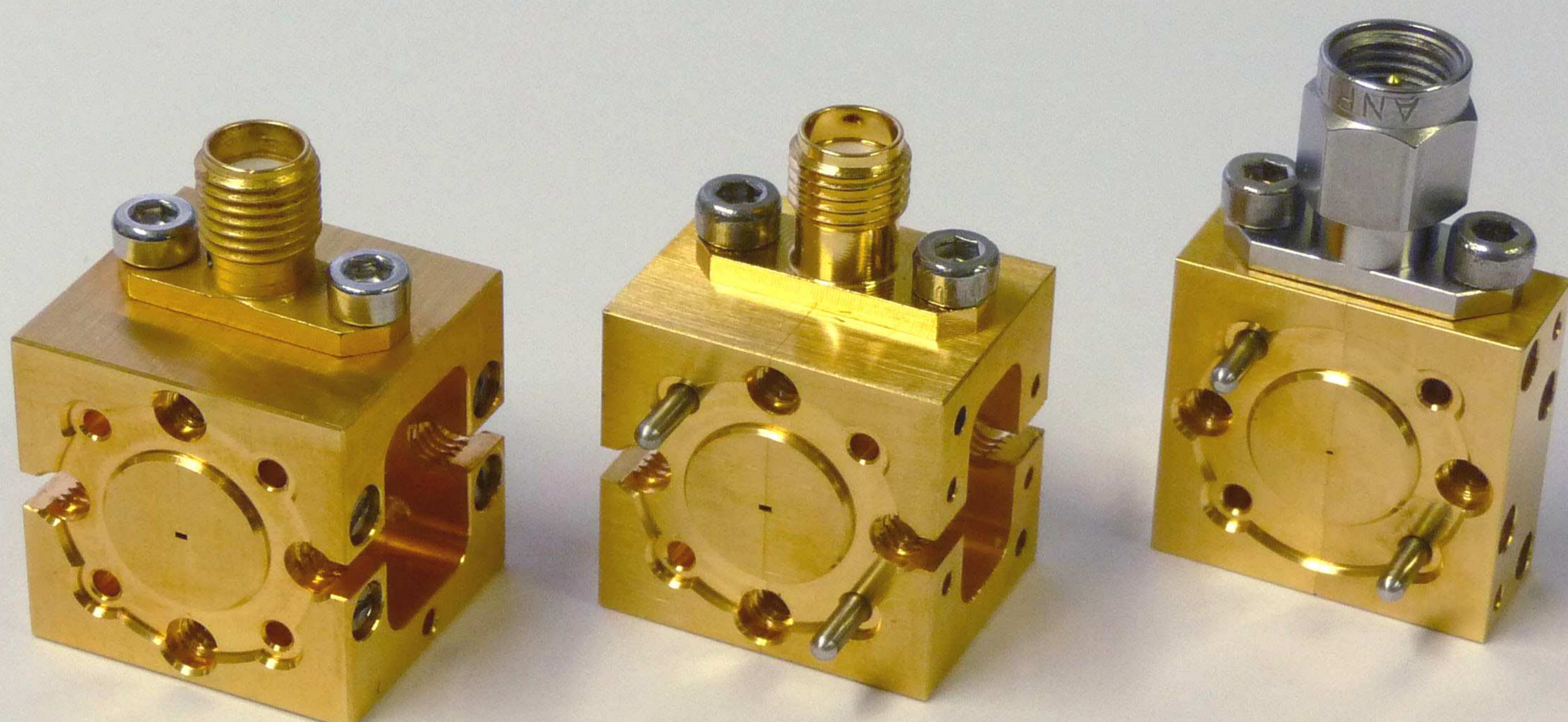


90/150 GHz: 4-point calibration

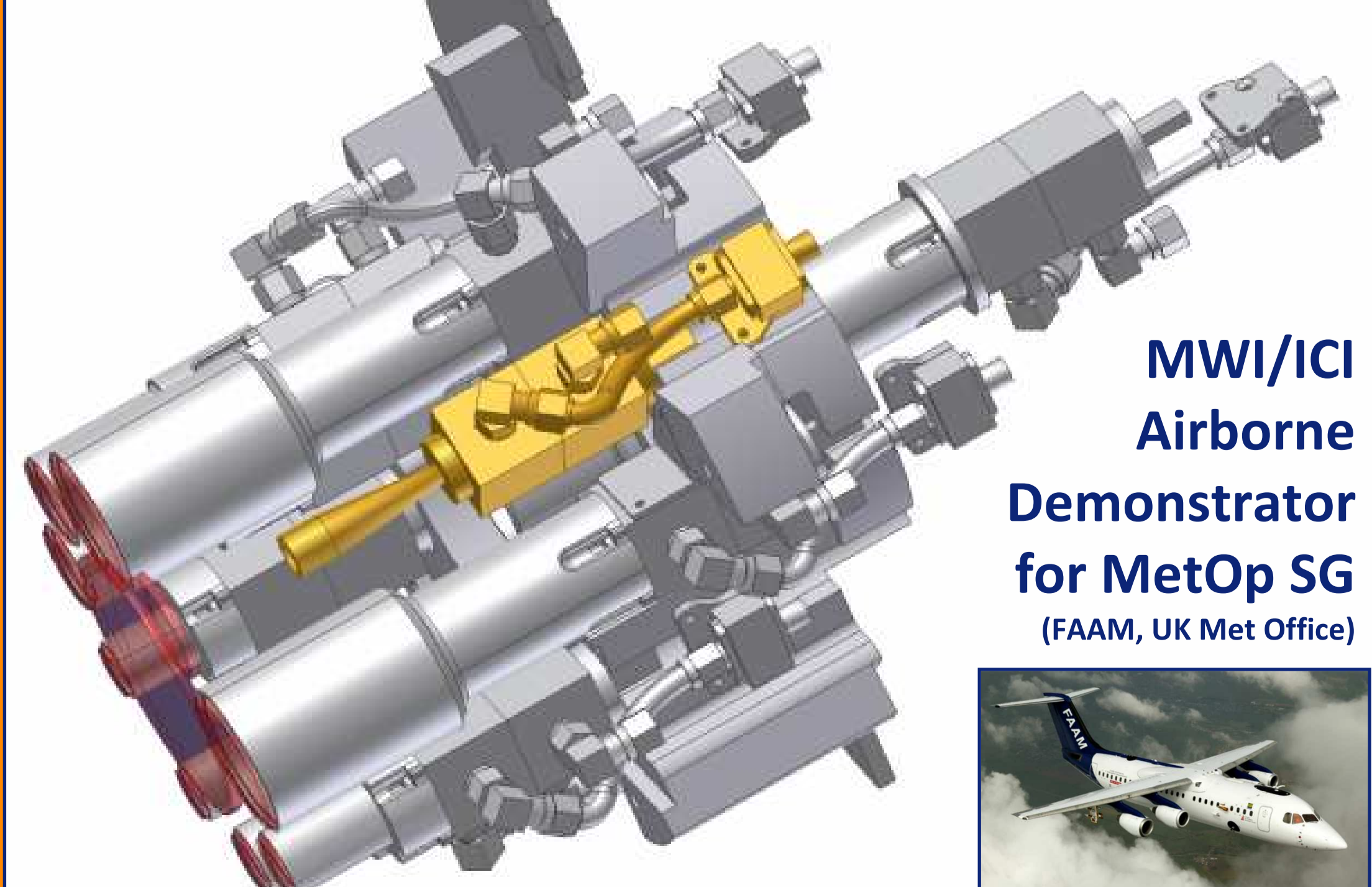


Receiver Frontend	RF Range [GHz]	DSB-Noise Temperature	IF-Bandwidth	LO Factor	Required LO Power
RFE 89	86-92	400 K	> 3 GHz	X3	7 dBm
RFE 118	110-126	680 K	> 8 GHz	X2	5 dBm
RFE 150	147-153	750 K	> 3 GHz	X2	4 dBm
RFE 166	158-191	650 K	> 8 GHz	X2	4 dBm
RFE 183	158-191	650 K	> 8 GHz	X2	4 dBm
RFE 229	121-228	750 K	> 8 GHz	X2	4-7 dBm
RFE 280	272-288	950 K	> 8 GHz	X2	4-7 dBm
RFE 300	290-310	1200 K	> 10 GHz	X2	4-7 dBm
RFE 340	332-348	1400 K	> 8 GHz	X2	4-7 dBm
RFE 424	416-456	1600 K	> 8 GHz	X2	7 dBm
RFE 448	416-456	1600 K	> 8 GHz	X2	7 dBm
RFE 664	652-676	2000 K	> 12 GHz	X2	4-7 dBm

## 664 GHz LO and Sub-Harm. Mixer



## ISMAR 664 GHz Receiver



MWI/ICI Airborne Demonstrator for MetOp SG (FAAM, UK Met Office)

