

10 GHz PA by OK2AQ

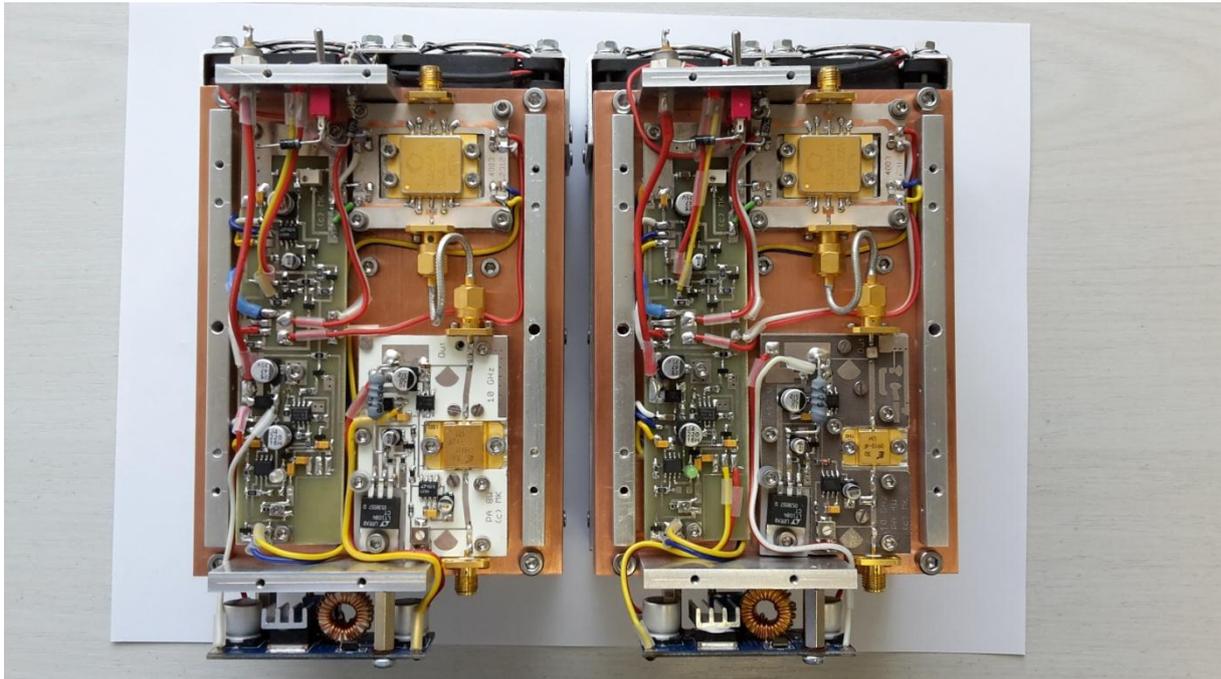


Figure 1. Two 10 GHz power amplifiers with TGA2312FL

Both PA are identical except drivers. TGA2312FL internal thermistor is used for a protection against overheating. A 24V/12V step down converter is used for the drivers supply. The TGA2312FL bearing including PCB with tuned microstrip structure were designed and produced by G3WDG.

The left one developed for OK1DFC has bigger driver – 8 W and gives 52 W output power at 2.4 W at the input. The total efficiency is a little bit worse due bigger driver.

The right one developed for OK2AQ has driver 4.5 W and gives 42 W output power at 1.4 W at the input. Very good total efficiency results in slightly warm cooler after long time operation.

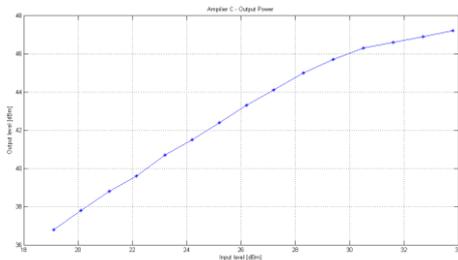


Figure 2. Output power

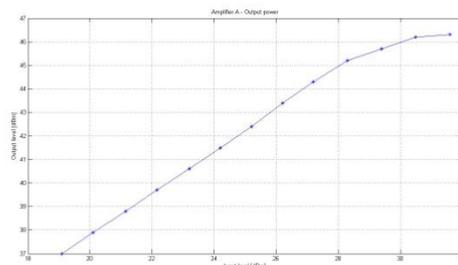


Figure 4. Output power

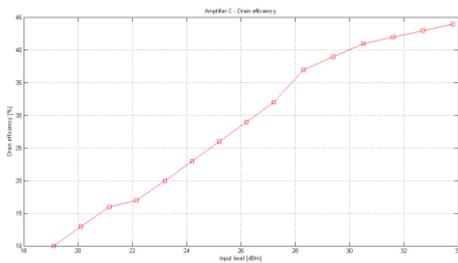


Figure 3. Drain efficiency

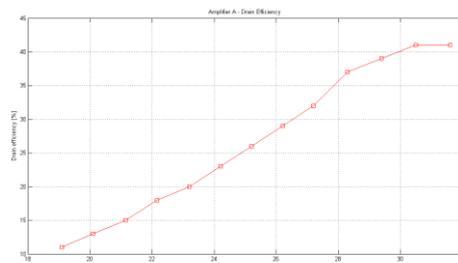


Figure 5. Drain efficiency