



UHF HYBRID DUPLEXER

Innovative duplexer device using different technologies over the transmission and reception paths

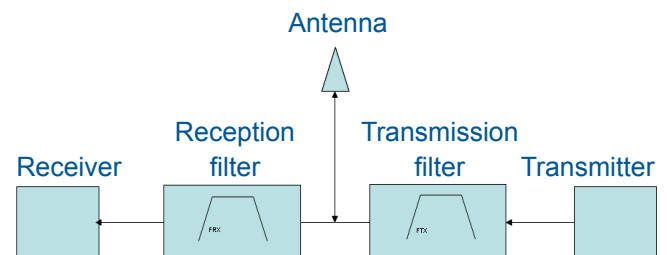
Technological benefits

Very compact

Optimisation of component sizing: size savings can reach a factor of 100 according to the filtering techniques used

Performance maintained

Power handling and adaptability not changed
Loss via insertion and insulation very similar to that of traditional duplexers



Invention overview

Use over a duplexer of filters of different technologies for input and output paths sized for these paths' powers.

It is then possible to use low power filtering technologies over the reception life and to obtain significant space and cost savings.



Gain of scale achieved by changing the filter technology for a UHF duplexer

Potential applications

All types of transmission / reception duplexers

From a few watts to several kW.
Communication equipment for small and large satellites
Land, sea, tactical and military terminals

Commercial benefits

Optimised payload

Weight and volume savings

Choice of optimised components

Cost savings on the reception path due to the use of optimised filtering technologies

TRL : 4

Patented invention, available under license