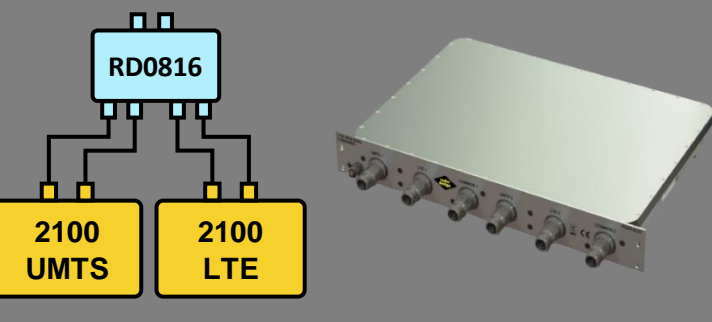




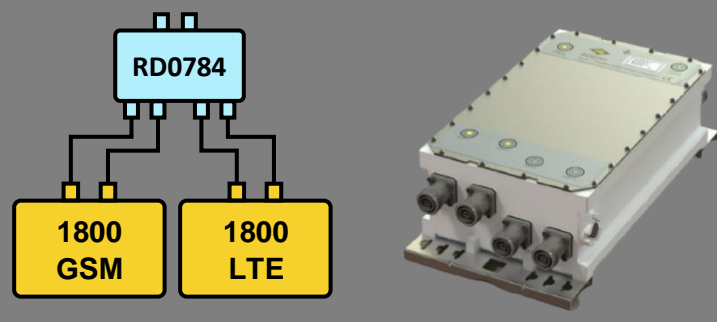
## Deploying Same Band Combiners

Same band combiners are vital solutions used by mobile network operators (MNOs) who wish to combine two radios, operating within the same frequency band, onto a common feeder. Traditionally, these solutions have been used to allow two MNOs to share the same site/antennas, or to allow one MNO to combine two different technologies (separate radios) onto a common feeder in the same frequency band. Having been heavily involved in a number of the world's largest shared networks over many years, Radio Design has developed a market-leading range of same band combiners.

Application A: Same band combiner used to combine two radios transmitting on the same frequency, but with different technologies:

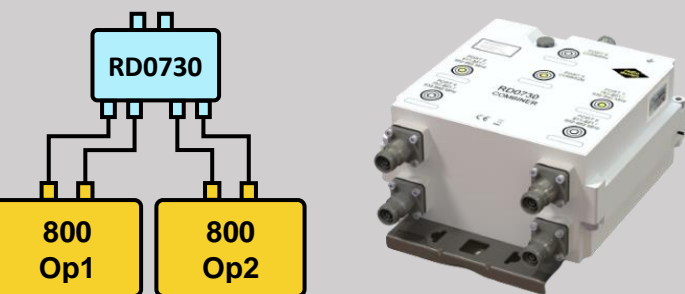


RD0816: 2100/2100 MHz same band combiner – adjacent

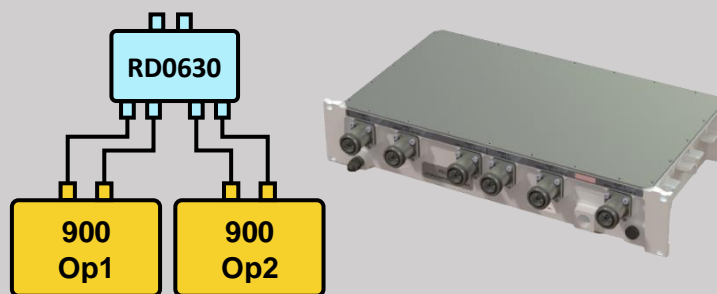


RD0784: 1800/1800 MHz same band combiner – small guard band

Application B: Same band combiner used to combine two MNO's radios transmitting on the same frequency onto the same feeder:



RD0730: 800/800 MHz same band combiner – non-adjacent



RD0630: 900/900 MHz same band combiner – small guard band

### Benefits of Same Band Combiners:

- MNOs can share infrastructure and save massively on deployment costs
- MNOs can continue using legacy radio equipment alongside newer radios
- MNOs can use their full spectrum range, beyond the bandwidth limitation of one radio
- MNOs can utilise the full output power of their radios, thereby maximising coverage