

Decoupled Power Splitter

380 – 430 MHz

TETRA, TETRAPOL

The decoupled power splitter can be used:

- for power distribution. For example: From one common antenna to several receivers of arbitrarily low frequency spacing,
- for power distribution. For example: From one transmitter to several outputs,
- for decoupled combining of several transmitters with arbitrarily low frequency spacing (loss: 4.7 dB resp. 6 dB),
- for decoupled combining of several transmitting/receiving units, whose integrated duplexers are within the same frequency range.

Function:

The decoupled power splitter has 3 or 4 inputs, one output, as well as 3 or 4 absorber ports. The inputs are only decoupled when the absorber ports are terminated with 50-Ω loads of suitable power.

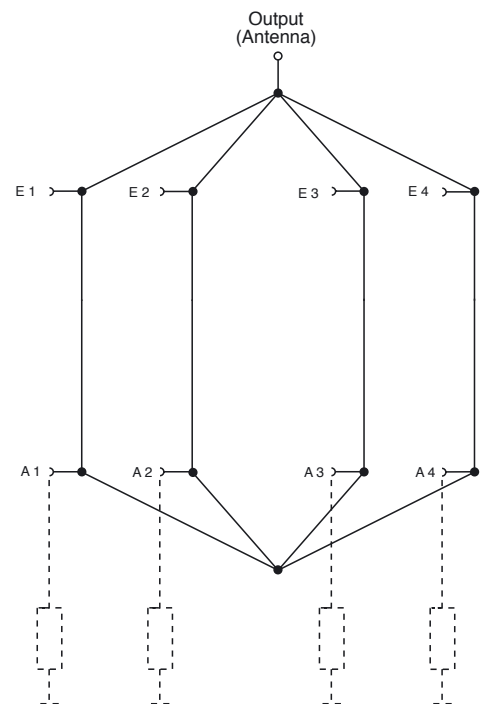
The absorbers of the 3:1-power splitter have to be dimensioned so that at least 2/3 of the power fed into the inputs can be absorbed. Example: If a power of 50 W is fed into every input, the absorbers have to absorb 33 W each.

The absorbers of the 4:1 power splitter have to be dimensioned so that at least 3/4 of the power fed into the inputs can be absorbed. Example: If a power of 50 W is fed into every input, the absorbers have to absorb 37 W each.



782 10189

1 : 4 power splitter 782 10189



Connectors E 1 ... E 4: Inputs, decoupled
Connectors A 1 ... A 4: External 50-Ω absorbers

Technical Data

Type No.	782 10231 1 : 3 Power splitter	782 10189 1 : 4 Power splitter
Power ratio	1 : 3	1 : 4
Frequency range	380 – 430 MHz	
Power dividing loss (incl. insertion loss)	< 5.5 dB	< 6.5 dB
Isolation between inputs	> 25 dB	> 30 dB
Impedance	50 Ω	
VSWR	< 1.2	
Input power	< 100 W per input	
Connectors	N female	
Material	Housing: Aluminium	
Installation	With 2 screws (max. 4 mm diameter)	
Weight	1.0 kg	1.5 kg
Packing size	220 mm x 90 mm x 110 mm	
Dimensions (w x h x d)	190 mm x 80 mm x 94 mm (with connectors)	

936.2312 Änderungen vorbehalten.