

The 728-044 and 729-812 decoupled power splitters can be used:

- For power distribution, e.g. from one common antenna to several receivers with frequency spacing as narrow as desired.
- For power distribution, for example: from one transmitter to several outputs.
- For the decoupled combining of several transmitters with frequency spacing as narrow as desired (at 4.7 dB or 6 dB loss).
- For the decoupled combining of two transmitting/receiving units, whose integrated duplexers are within the same frequency range.

**Function:** The decoupled 3:1 power splitter has 3 inputs, one output, and 3 absorber ports. The decoupled 4:1 power splitter has 4 inputs, one output, and 4 absorber ports. The inputs are only decoupled if the absorber ports are terminated with 50Ω loads of suitable power.

**Dimensioning the absorber:** The absorbers of the 3:1 power splitter must be dimensioned so that at least  $\frac{2}{3}$  of the power fed into the inputs can be absorbed.  
Example: If a power of 50 watts is fed into every input, then the absorbers must be able to absorb 33 watts each.

The absorbers of the 4:1 power splitter must be dimensioned so that at least  $\frac{3}{4}$  of the power fed into the inputs can be absorbed.  
Example: If a power of 50 watts is fed into every input, then the absorbers must be able to absorb 37 watts each.



**Specifications:**

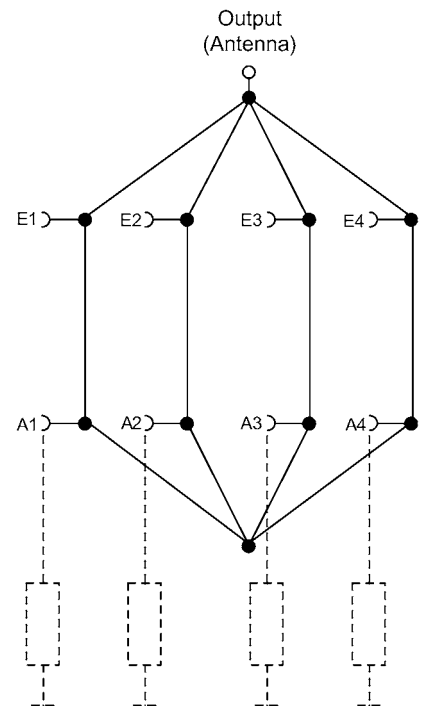
Frequency range	806–960 MHz	
Power splitting ratio	728-044	1:3
	729-812	1:4
Power dividing loss	728-044	<5.5 dB (including insertion loss)
	729-812	<6.5 dB (including insertion loss)
Impedance	50 ohms	
VSWR*	< 1.2:1	
Maximum input power	<100 watts (each input)	
Connector	N female	
Isolation	>25 dB	
Weight	728-044	1.1 lb (0.5 kg)
	729-812	1.54 lb (0.7 kg)
Dimensions	728-044	5.5 x 2.9 x 2.7 inches (140 x 74 x 68 mm)
	729-812	5.5 x 4.5 x 2.7 inches (140 x 114 x 68 mm)
Mounting	Mounts with two screws (4 mm maximum)	

\* VSWR is measured when the remaining ports are terminated with 50 Ω loads.

**Order Information:**

Model	Description
728-044 KS1004	Decoupled power splitter 1:3
729-812 KS1005	Decoupled power splitter 1:4

1:4 power splitter 729 812



Connectors E1 ... E4: inputs, decoupled  
Connectors A1 ... A4: external 50-Ω absorbers



10548-A  
936.1419/b

All specifications are subject to change without notice. The latest specifications are available at [www.kathrein-scala.com](http://www.kathrein-scala.com).