

R&S® AMU-K74 MIMO Fading Option Specifications



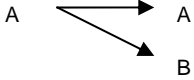
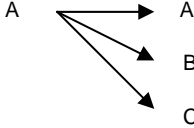
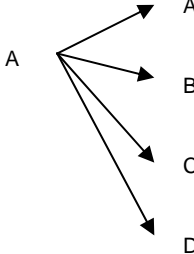
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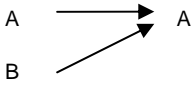
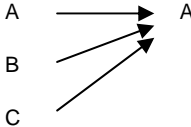
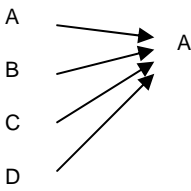
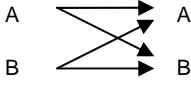
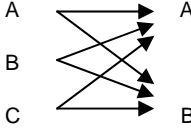
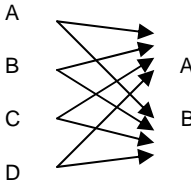
Specifications

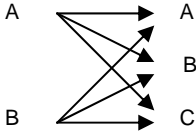
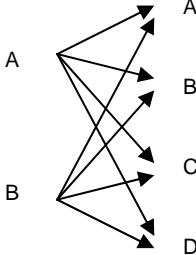
Data without tolerance limits is not binding.

MIMO fading (R&S® AMU-K74 option)

The R&S® AMU-K74 option allows four fading channels to be simulated as is required for 1x2, 2x1 and 2x2 MIMO receiver tests. Both the R&S® AMU-B14 and the R&S® AMU-B15 options must be installed (signal paths A and B) and two baseband sources (R&S® AMU-B9, -B10, -B11, or -B17) must be present. By combining two instruments, it is possible to simulate receiver test scenarios for 1x3, 1x4, 2x3, 2x4, 3x1, 4x1, 3x2 and 4x2 MIMO.

Number of fading paths in each channel	standard, RF bandwidth 80 MHz, timing resolution 10 ns	10
	with R&S® AMU-K71 option, RF bandwidth 50 MHz, timing resolution 0.01 ns	6
	with R&S® AMU-K71 option, RF bandwidth 30 MHz, timing resolution 0.01 ns	4
Steering matrix	The steering matrix can be set by setting the diagonal elements of the correlation matrix.	
Correlation	The correlation between corresponding fading paths of the signal paths can be set in a correlation matrix. For each fading path index, an individual matrix can be set.	
	correlation coefficient	
	setting range	0 % to 100 %
	resolution	1 %
	correlation phase	
Correlation matrix setting	setting range	0° to 360°
	resolution	1°
Correlation matrix setting	individually or with Kronecker assumption (RX and TX antenna correlation with automatic calculation of matrix)	
Matrix representation	(real, imaginary) or (magnitude, phase)	
Start seed	settable	
1x2 MIMO		
Number of signal paths	with R&S® AMU-B14 and R&S® AMU-B15	2
Signal routing	1x2 MIMO, simulating fading channels between one TX and two RX antennas	
1x3 MIMO		
Number of signal paths	with two R&S® AMU200A, both with R&S® AMU-B14 and R&S® AMU-B15	3
Signal routing	1x3 MIMO, simulating fading channels between one TX and three RX antennas	
1x4 MIMO		
Number of signal paths	with two R&S® AMU200A, both with R&S® AMU-B14 and R&S® AMU-B15	4
Signal routing	1x4 MIMO, simulating fading channels between one TX and four RX antennas	

2x1 MIMO		
Number of signal paths	with R&S [®] AMU-B14 and R&S [®] AMU-B15	2
Signal routing	2x1 MIMO, simulating fading channels between two TX and one RX antennas	
3x1 MIMO		
Number of signal paths	with two R&S [®] AMU200A, both with R&S [®] AMU-B14 and R&S [®] AMU-B15; external signal combiner required (either baseband or RF combiner)	3
Signal routing	3x1 MIMO, simulating fading channels between three TX and one RX antennas	
4x1 MIMO		
Number of signal paths	with two R&S [®] AMU200A, both with R&S [®] AMU-B14 and R&S [®] AMU-B15; external signal combiner required (either baseband or RF combiner)	4
Signal routing	4x1 MIMO, simulating fading channels between four TX and one RX antennas	
2x2 MIMO		
Number of signal paths	with R&S [®] AMU-B14 and R&S [®] AMU-B15	4
Signal routing	2x2 MIMO, simulating fading channels between two TX and two RX antennas	
3x2 MIMO		
Number of signal paths	with two R&S [®] AMU200A, both with R&S [®] AMU-B14 and R&S [®] AMU-B15; external signal combiner required (either baseband or RF combiner)	6
Signal routing	3x2 MIMO, simulating fading channels between three TX and two RX antennas	
4x2 MIMO		
Number of signal paths	with two R&S [®] AMU200A, both with R&S [®] AMU-B14 and R&S [®] AMU-B15; external signal combiner required (either baseband or RF combiner)	8
Signal routing	4x2 MIMO, simulating fading channels between four TX and two RX antennas	

2x3 MIMO		
Number of signal paths	with two R&S [®] AMU200A, both with R&S [®] AMU-B14 and R&S [®] AMU-B15	6
Signal routing	2x3 MIMO, simulating fading channels between two TX and three RX antennas	
2x4 MIMO		
Number of signal paths	with two R&S [®] AMU200A, both with R&S [®] AMU-B14 and R&S [®] AMU-B15	8
Signal routing	2x4 MIMO, simulating fading channels between two TX and four RX antennas	

Ordering information

Designation	Type	Order No.
MIMO Fading Option	R&S®AMU-K74	1402.9857.02

Service you can rely on

- | In 70 countries
- | Person-to-person
- | Customized and flexible
- | Quality with a warranty
- | No hidden terms

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Rohde & Schwarz is an independent group of companies specializing in electronics. It is a leading supplier of solutions in the fields of test and measurement, broadcasting, radiomonitoring and radiolocation, as well as secure communications. Established 75 years ago, Rohde & Schwarz has a global presence and a dedicated service network in over 70 countries. Company headquarters are in Munich, Germany.

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For product brochure,
see PD 5213.7954.12
and www.rohde-schwarz.com

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*0,14 €/min within German wireline network; rates may vary in other networks (wireline and mobile) and countries.