



# R&S® ZV-WR10 Waveguide Calibration Kits

Data sheet



**ROHDE & SCHWARZ**

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Specifications apply under the following conditions:

Specified environmental conditions met and calibration cycle adhered to. Data designated "overrange" and data without tolerance limits is not binding.

## Measurement range

Frequency range		75 GHz to 110 GHz
Damage level		+13 dBm
Waveguide designator	Electronic Industries Association EIA	WR10
Connector type	anti-cocking flange	precision waveguide flange compatible with UG387/U-M

## Standards

Two different calibration kits are available. One kit contains three calibration standards: short, shim, and a fixed match, the other additionally includes a sliding match.

Short	length	0 mm
Shim	length	1.085 mm $\pm$ 5 $\mu$ m
Fixed match	return loss	>30 dB, typ. >35 dB
Sliding match	return loss of match element	>30 dB, typ. >35 dB

## Effective system data of R&S® ZV-WR10

This data is valid between +18 °C and +28 °C, at a measurement bandwidth of 10 Hz, and a nominal power of +2 dBm at the calibration ports, and after performing a TOSM calibration at the test ports of the R&S® ZVA-Z110 converters.

Directivity	calibrated with fixed match	>30 dB, typ. >35 dB
	calibrated with sliding match	>40 dB, typ. >42 dB
Source match		>30 dB, typ. >35 dB
Reflection tracking		<0.2 dB, typ. <0.1 dB
Load match	calibrated with fixed match	>30 dB, typ. >34 dB
	calibrated with sliding match	>35 dB, typ. >40 dB
Transmission tracking		<0.2 dB, typ. <0.1 dB

## General data

Temperature loading	operating temperature range	+5 °C to +40 °C
	permissible temperature range	0 °C to +50 °C
	storage temperature range	−40 °C to +70 °C
		in line with IEC 60068-2-1 and IEC 60068-2-2
Damp heat		+40 °C at 95 % rel. humidity
Mechanical resistance	vibration test, sinusoidal	5 Hz to 150 Hz, in line with IEC 60068-2-6
	vibration test, random	10 Hz to 300 Hz, in line with IEC 60068-2-64
	shock test	40 g shock spectrum, in line with IEC 60068-2-27, MIL-STD-810
Calibration interval		1 year
Dimensions (W × H × D) of case		256 mm × 55 mm × 215 mm, 10.1 in × 2.2 in × 8.5 in
Weight	including case	1 kg (2.2 lb)
Shipping weight		3 kg (6.6 lb)

## Ordering information

Designation	Type	Order No.
Waveguide Calibration Kit WR10, 75 GHz to 110 GHz (without sliding match)	R&S®ZV-WR10	1307.7100.10
Waveguide Calibration Kit WR10, 75 GHz to 110 GHz (sliding match included)	R&S®ZV-WR10	1307.7100.11



For product brochure, see PD 5213.8273.12  
and [www.rohde-schwarz.com](http://www.rohde-schwarz.com)  
(search term: ZV-WR10)



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