# Voltage, Power, Frequency Measurements

# Millivoltmeter R&S®URV5

DC, 9 kHz to 3/26.5 GHz  $200~\mu\text{V} \text{ to } 1000~\text{V}$  Voltage, level, power measurements; trend indication



# **Brief description**

Millivoltmeter R&S®URV5 is a broadband voltage, level and power meter of high accuracy and sensitivity. It is suitable both for manual operation and for use in systems. A wide choice of individually calibrated probes and sensors allows R&S®URV5 to be used for a great variety of measurements:

- With RF probe and DC probe for noload AC and DC voltage measurements
- Voltage (and power) measurements in coaxial 50  $\Omega$  and 75  $\Omega$  systems using low-reflection and low-loss insertion units
- Power measurements up to 26.5 GHz using Power Sensors R&S®NRV-Z1 to -Z6

#### Main features

- Two test inputs
- High accuracy through μP-controlled error correction: ±1%
- ◆ Dynamic range >94 dB
- ◆ IEC/IEEE-bus interface
- Readout in all standard units with selectable reference impedance; relative measurements
- Optional DC output
- ◆ PEP measurement

# Specifications in brief,

Probes and sensors			all R&S®URV5 probes and R&S®NRV sensors, except R&S®NRV-Z3x and R&S®NRV-Z5x, -Z15				
Test channels			2 (A and B)				
Absolute measurement			A, B				
Relative measurement			A/REF <sub>A</sub> , B/REF <sub>B</sub> , A/B, B/A				
Absolute readout			V, W, dBm, dBV				
Relative readout			ΔV, ΔW, Δ%, ΔdB, X/REF				
Resolution			0.01% or 0.01 dB				
Accuracy of voltage readout in V (18°C to 28°C)			±0.15% of rdg per channel				
Filter			to reduce display noise in 6 steps (F0 to F5), selectable				
Zero adjustment			via keyboard or remote control				
Measurement rate (manual)			approx. 1 measurement/s with filter F0, up to 30 measurements/s with filter F5				
Measurement time (IEC/IEEE bus)			approx. 0.05 s with filter F5, up to 20 s with filter F0				
PEP measurement							
Pulse width			approx. 200 μs to CW				
Min. pulse repetition frequency							
Filter	F0	F1		F2	F3	F4	F5
f <sub>min</sub> /Hz	0.05	0.25		1	5	25	100

Frequency-response correction (selectable)	sensor-specific frequency response after entry of test frequency $% \left( \mathbf{r}\right) =\left( \mathbf{r}\right) $					
Attenuation compensation (selectable)	one attenuation value per channel can be entered (-199.99 dB to +199.99 dB)					
Reference value for relative measurements	one value per channel					
Optional DC Output R&S®URV5-B2						
Output voltage range (EMKF)	$-1.999 \text{ V to } +1.999 \text{ V, } R_{out} = 1 \text{ k}\Omega$					
Resolution; error	1 mV (10 digit); ±2 mV					
General data						
Remote control	IEC 625-1 (IEEE 488) for control of all instrument functions					
Power supply	100/120/220/240 V $\pm$ 10%, 47 Hz to 63 Hz, 400 Hz, 30 VA					
Dimensions (W $\times$ H $\times$ D)	241 mm × 110 mm × 340 mm					
Weight	4.4 kg					

# Ordering information

Millivoltmeter	R&S®URV5	0394.8010.02	
Options			
DC Output	R&S®URV5-B2	0079.0631.00	
Service Kit for Calibration	R&S®UZ-8	0394.9968.02	



Телефон: +7 (499) 685-7744 used@used4test.ru www.used4test.ru