

# Level Meter URV35

DC to 3/40 GHz

200  $\mu\text{V}$  to 1000 V

100 pW to 30 W

Power and voltage measurement with a unique analog/digital display



Photo 40278

## Brief description

URV35 is a voltmeter and power meter for versatile applications in service and production as well as for precision measurements in RF and microwave labs. A large variety of probes and sensors allows voltage measurements up to 3 GHz and power measurements up to 40 GHz.

## Specifications in brief; voltage probes page 262, power sensors page 266

Probes and sensors	all URV5 probes and NRV sensors
Display	backlit LCD, moving-coil meter with short response time
Absolute readout	dBm, dB $\mu\text{V}$ , V or W
Relative readout	dB, referred to stored reference value
Resolution of digital display	4 $\frac{1}{2}$ digits: 19999 steps; 0.001 dB
Analog display	3 $\frac{1}{2}$ digits: 1999 steps; 0.01 dB steps of 1-2.5-5 for V, W and dB, 5 (10) dB for dBm and dB $\mu\text{V}$ with windows of 10 (20) dB
Entry of scaling	left- and right-hand scale limits
Display filtering	level-dependent digital averaging filter
Accuracy (18 to 28°C)	
Digital display	$\pm 0.02$ dB $\pm 1$ digit
Moving-coil meter	1.5% of full scale
Zero adjustment	via interface or manually, approx. 4 s
Hold function	for displayed measurement result
Measurement rate	5 readouts/s in manual mode
Frequency-response correction (selectable)	sensor-specific calibration data taken into account
Attenuation compensation (selectable)	external attenuation or gain taken into account, range $\pm 199.99$ dB
Entry of reference value	measured value on keystroke, or value entered via interface or keypad
Reference impedance	50 $\Omega$ /75 $\Omega$ , automatic/selectable
<b>Sensor check source</b> (option NRVS-B1)	
Output	50 MHz/1 mW $\pm 0.7\%$ ; N connector
VSWR	1.05

## Interfaces

Remote control	serial interface (V.24, RS-232-C)
DC frequency input	BNC, $R_m = 9 \text{ M}\Omega$
Input voltage range	$\pm 12 \text{ V}$ , linear with selectable scale

## Main features

- Compact, handy and mobile
- Voltmeter and power meter in one unit
- Rugged design
- Combined (true) analog and digital display
- Menu-guided operation
- AC-supply or battery operation

- Large choice of probes and sensors
- DC frequency input for tracking frequency-response correction
- Analog output for YT recorder
- RS-232-C interface
- Test generator for checking the probe or sensor (optional)

DC voltage output	BNC, $R_{\text{out}} = 1 \text{ k}\Omega$ , EMF proportional to pointer deflection
Left-/right-hand scale limit	corresponding to 0/+3 V
Additional settling time	250 ms
Accuracy	$\pm 5 \text{ mV}$
<b>General data</b>	
Model 02 power supply	
Battery, standard	5 x 1.5 V alkaline-manganese LR20
Operating time	125 h
Rechargeable battery, retrofittable	5 x 1.2 V NiCd IEC KR35/62
Operating/charging time	60 h/24 h
AC supply	
with UZ-35, European version	230 V $\pm 10\%$ , 47 to 63 Hz
AC supply	
with UZ-35, US version	120 V $\pm 10\%$ , 57 to 63 Hz
Model 03	115 V $\pm 15\%$ /-22%, 47 to 440 Hz
Dimensions (W x H x D)	230 V $\pm 15\%$ /-22%, 47 to 63 Hz (switch-selectable); 6 VA
Weight model 02	220 mm x 100 mm x 240 mm
model 03	3.1 kg/2.3 kg with/without batteries
	2.4 kg

## Ordering information

<b>Level Meter</b> battery-operated	URV35	1020.0002.02
AC-supply model	URV35	1020.0002.03

## Options

Sensor Check Source	NRVS-B1	1029.2908.02
Power Supply/Charger (for model 02) <sup>1)</sup>	UZ-35	1020.1709.02
Power Supply/Charger (for model 02) <sup>2)</sup>	UZ-35	1020.1709.04
Service Kit	URV35-S1	1029.2608.02

1) European power supply

2) US power supply