

Technical Data

Measured Quantity	Measuring Ranges ²⁾ (Automatic Range Selection)	Resolution	Frequency Range / Measuring Current	Intrinsic Uncertainty
U-	0.10 V ... 8.99 V 9.0 V ... 99.9 V 100 V ... 1500 V	0.01 V 0.1 V 1 V	—	± (1.5% rdg. + 3 digits)
U~ TRMS	1.0 V ... 99.9 V 100 V ... 1200 V	0.1 V 1 V	15 Hz ... 1.8 kHz	±(1.5% rdg. + 3 digits)
U~ ¹⁾	15 V ... 99.9 V 100 V ... 499 V		> 1.8 kHz ... 10 kHz	±(15% rdg. + 3digits)
	500 V ... 1200 V		> 1.8 kHz ... 4 kHz	
R	0 kΩ ... 49 kΩ 50 kΩ ... 1999 kΩ	1 kΩ	5 μA 1 μA	±(5% rdg. + 3 digits)

¹⁾ TRMS value, sinusoidal

²⁾ Display as from 0,0 V

Key: rdg. = reading (measured value)

Nominal Conditions of Use

Nominal voltage range	24 ... 1000 V AC / 1500 V DC (Auto on from 24 V onwards)
Overvoltage range	> 1000 V AC ... 1200 V AC (beyond the limit specified in IEC 61243-3)
Nominal frequency range	15 Hz ... 10 kHz < 500 V 15 Hz ... 4 kHz > 500 V
Input impedance	approx. 320 kΩ AC, approx. 710 kΩ DC
Current	3.2 mA at 1000 V AC, 1.4 mA at 1000 V DC
On-time	2 minutes




LEDs	
LV display (round)	red as from ±50 V AC and 120 V DC
green square LED Ω	continuity up to 1999 Ω and diodes
2 triangular LEDs	for phase sequence left/right

Digital Display

Type	LCD, 7-segment characters, 3½ places, for V or kΩ measurement as well as voltage type ~/DC and polarity, with background illumination
Display range	0 ... 1999 digits

Overflow display	"OL" appears
Measuring rate	3 measurements per second

Power Supply

Battery	9 V flat block battery zinc-carbon battery per IEC 6 F22, alkaline manganese cell per IEC 6 LR61, or equivalent rechargeable NiMH battery
Battery test	The battery status is symbolized by a 3-stage battery indicator „  “.

Electrical Safety

Measurement category	CAT IV 600 V CAT III 1000 V
Surge withstand capability	> 12 kV (1.2 / 50 μs) (type testing)
Test voltage	6 kV

Electromagnetic Compatibility

Interference emission	EN 61236-1:2006 class B
Interference immunity	EN 61236-1:2006

Ambient Conditions

Operating temperature	-10 ... +55 °C
Relative humidity	max. 85%
Elevation	max. 2000 m

Mechanical Design

Protection	IP 65
Housing	Impact-resistant, dust-proof plastic housing with unbreakable display cover
Connector cable between test probes	PUR sheathed cable, 1000 V, 1 m
Dimensions	Test probe with display panel: 62 x 240 x 39 mm
Weight	270 g (including battery)

Standard Equipment

- 1 Voltage tester
- 1 Operating instructions
- 1 Battery

Order Information

Designation	Type	Article Number
Voltage and continuity tester with phase, polarity and phase sequence testing	METRAVOLT 12D+L	M630G