

Serie "Classic"

Type: **GANZUNIV-1**
GANZUNIV-3

Main characteristics

- Protecting switch
- High accuracy measurement
- Linear mirror scale for direct and alternating currents
- Scale length: 110 mm
- Measuring ranges to be selected by a single switch
- Measurement type selection and pole reversal by push-button switch
- Wide frequency range
- Shockproof, low-consumption movement with taut-band bearing
- Reliable overload protection
- Single pair of terminals for each measurement (except for the 10 A and 30 A measuring ranges)
- Direct and alternating currents superimposed on each other: A built-in measuring transformer enables separate determination of the DC and AC components
- Aesthetic grey plastic casing with pull-out handle



Application

The **GANZUNIV-1** universal instruments serve first of all for power current measurements, where low consumption and the possibility of measuring higher currents are indispensable requirements. The instrument is suitable for multi-purpose application in laboratories, test rooms as well as at electric installation, commissioning and service work. Combined with thermocouple, suitable for temperature measurements.

The **GANZUNIV-3** universal instrument is excellently suitable for low-current measurements in the wide field of electronics such as radio, television and telecommunication industries. Due to its high accuracy of measurement and low consumption, it is also recommended for use in laboratories and test rooms.

Technical data

OVERLOAD PROTECTION:

Bearing provided with multiple protection the instrument cannot be damaged by improper use or overload. The 10A or 30A range (separate terminal) is not protected.

Automatic protective switch: the coil of the protective switch relay is connected to a selection circuit by means of a switch mechanically coupled with the measuring range switch. After the relay operates, the contact the automatic protective switch will open and interrupt the whole measuring circuit. The relay operates upon the effect of both DC and AC overload. A special mechanism prevents the automatic protective switch from being switched back in case of overload.

Safety fuse: a medium time lag safety fuse is connected in series with the terminal " $\pm V, A, \Omega$ ". It protects the higher current measuring ranges till the protective switch operates, furthermore, assures protection in case of short-circuit.

Surge arrester: thanks to the surge arrester connected in parallel with the input terminals and having a lower break down voltage than the internal circuitry, low power voltages exceeding the permissible ones (voltage peaks) cannot damage the instrument.

Glow tubes: glow tubes protect the diodes applied for rectification at AC measurements, so that voltage peaks cannot do damage to them.

Protecting diodes: the movement is also protected separately by 2 pcs diodes antiparallel connected diodes coupled with its moving coil.

Battery for resistance measurement: R20 IEC 1.5V

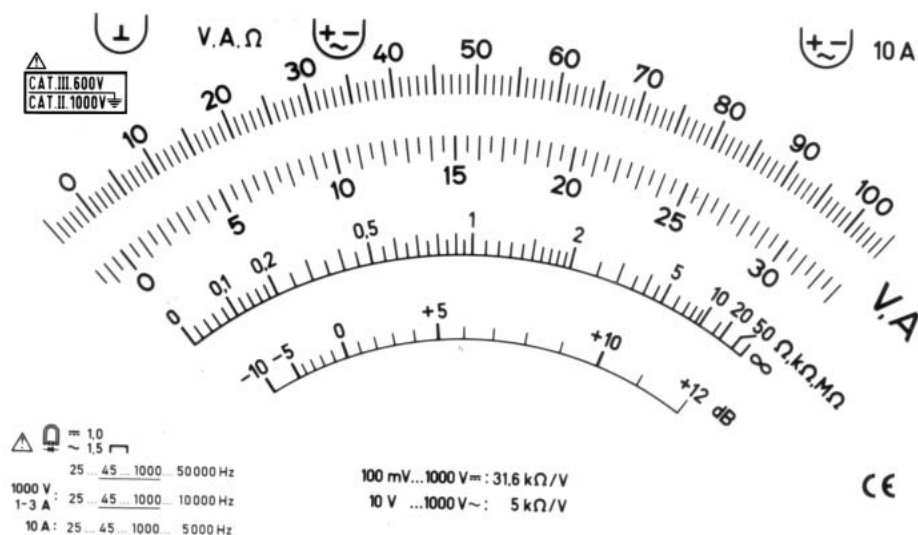
Test voltage: 5 kV_{eff} 50Hz 1 min

Dimensions: 205 x 128 x 100 mm

Weight: 1.5 kg (with battery)

| ANALOG MULTIMETERS | | |
|----------------------------|--|--|
| | GANZUNIV-1 Cat. No. 1048-40 | GANZUNIV-3 Cat. No. 1049-40 |
| DC Voltage [V] | 12 mV ... 1200 V 11 ranges | 100 mV ... 1000 V 9 ranges |
| AC Voltage [V] | 0.6 V ... 1200 V 8 ranges | 0.3 V ... 1000 V 8 ranges |
| DC Current [A] | 120 µA ... 30 A 10 ranges | 30 µA ... 10 A 12 ranges |
| AC Current [A] | 0.3 mA ... 30 A 9 ranges | 0.3 A ... 10 A 10 ranges |
| Resistance | 0.2 Ω ... 5 MΩ 5 ranges | 0.2 Ω ... 50 MΩ 5 ranges |
| Temperature | 0.....220 °C, thermocouple type J 0...1000 °C, thermocouple type K 0...1600 °C, thermocouple type S | ----- |
| dB scale | ----- | -10 ... 12 dB |
| Accuracy | DC 1 % AC 1,5 % | DC 1 % AC 1.5 % |
| Internal resistance | 3333 Ω/V AC/DC | 31.6 kΩ/V -DC 5 kΩ/V -AC |
| Voltage drop | 30 mV ... 500 mV | 100 mV ... 450 mV |
| Frequency | 25 Hz ... 25 kHz | 25 Hz ... 10 kHz (50 kHz) |
| Extra accessories | thermocouple | ----- |

Scale (GANZUNIV-3)



Accessories:

2 pcs fuses

The instruments are delivered in polystyrene foam box.