

# GW-INSTEK

## Table Multimeter

Version 05/14



Item no. 123022	GDM 8246	50000 Counts
Item no. 123023	GDM 8245	50000 Counts
Item no. 123024	GDM 8251A	120000 Counts
Item no. 123025	GDM 8255A	199999 Counts
Item no. 1086575	GDM-8342GPIB	50000 Counts
Item no. 1086576	GDM-8342USB	50000 Counts
Item no. 1086577	GDM-8341	50000 Counts

### Intended Use

Depending on the model the table multimeter allows measuring of different electric values like e.g. AC and DC voltage, AC and DC current, resistance, frequency as well as capacity and temperature. Furthermore diode and continuity tests can be conducted.

The table multimeter shows all measuring values in the double display. Measuring value and device memory facilitate working with the table multimeter. The measuring connection is established via BNC measuring sockets.

Measurements must only be made up to 1000 V maximum in the overvoltage range of CAT 0 and maximum 500 V in the range CAT II, respectively. The maximum voltage in the current measuring range "Ampere" (A) must not exceed 500 V.

For automatic control and measuring value recording different interfaces are available depending on the model.

The maximum measuring voltages indicated on the device must never be exceeded. Use divider probes if necessary.

The device should only be connected and operated by an earthed shockproof socket of the public alternating current grid.

Any use, other than that described above, could lead to damage to this product and involves the risk of short circuits, fire, electric shock, etc.

The product must not be changed or modified in any way. Do not open the housing!

Measurement in damp locations, outdoors or under adverse environmental conditions is not permitted.

Unfavourable ambient conditions are:

- Wet conditions or high air humidity
- Dust and flammable gases, vapours or solvent,
- Thunderstorms or similar conditions such as strong electrostatic fields etc.

Always observe the safety notes included in these operating instructions.

This quick guide explains safety measures to make working with the device as safe as possible. The individual functions of the device are described in more detail in the enclosed operating manual.

## Safety Instructions and Hazard Warnings



Please read all of the operating instructions before using the product for the first time; they contain important information regarding the correct operation.

- The warranty will be void in the event of damage caused by failure to observe these safety instructions! We do not assume any liability for any consequential damage!
- We shall not accept liability for damage to property or personal injury caused by incorrect handling or non-compliance with the safety instructions! The warranty will be void in such cases.
- The unauthorised conversion and/or modification of the product is inadmissible because of safety and approval reasons (CE).
- The construction of the product corresponds to protection class 1. Only a correct earthed mains socket (100 - 240 V~) of the public power supply should be used.
- The mains outlet must be located near to the device and be easily accessible.
- Measuring devices and devices connected to the power supply should be kept out of reach of children. Therefore, be especially careful when children are around.
- Connect the measuring lines to the multimeter before connecting them to the measuring circuit to be tested. After finishing the measurements, first of all disconnect the measurement contacts from the circuit before you disconnect the measuring lines from the multimeter.
- Take particular care when dealing with voltages exceeding 25V AC or 35V DC! Even at these voltages it is possible to get a fatal electric shock if you touch electric conductors.
- Prior to each measurement, check your instrument and its measuring leads for damage. Never carry out any measurements if the protecting insulation is defective (torn, ripped off, etc.).
- To avoid electric shock, do not touch the connections/measuring points directly or indirectly during measurements.
- Never touch the probes outside of the marked handling area during a measurement. There is danger of a life-threatening electric shock.
- Do not use the device shortly before or after a thunderstorm (lightning! // high-energy overvoltages!). Make sure that your hands, shoes, clothing, the floor, the measuring device and/or measuring lines, the circuits and also parts of it are always dry.
- Do not use the product within rooms or in bad ambient conditions where flammable gases, vapours or explosive dust may be present or are present.
- Avoid operation near:
  - strong magnetic or electromagnetic fields
  - transmitter aerials or HF generators,
  - These can affect the measurement
- For safety reasons, when measuring only use measuring cables or accessories which are adjusted to the specifications of the multimeter. Only use double or additionally insulated measuring accessories.
- If you have reason to assume that safe operation is no longer possible, disconnect the device immediately and secure it against inadvertent operation. It can be assumed that safe operation is no longer possible if:
  - the device shows visible damage,
  - the device no longer operates and
  - after being stored under unfavourable conditions for a long period of time or
  - it has been subjected to considerable stress in transit
- Never switch the device on immediately after having taken it from a cold in to a warm environment. The condensation that forms might destroy your device. Allow the device to reach room temperature before switching it on.
- Never disassemble the product! There is the danger of a lethal electric shock!
- Do not leave packing materials unattended. They may become dangerous playthings for children.