

Integrated accessories:



Triple lead
red, blue, green



Measuring lead Schuko
ca. 1,4 m



Clamp red,
CAT III 1000 V



Clamp blue,
CAT III 1000 V



Clamp green,
CAT III 1000 V



Soft bag for device and
accessories



Factory calibration
certificate

The following accessories are available as option:

- Label tested
- Brush probes
- Measuring leads
- AC differential current clamp DI40
- Measuring lead drum
- Measuring lance 2 m for e.g. ceiling lamps
- Calibration adapter KA1
- VLS-Adapter
- VCEE 16/32/63
- TCEE 16/32/63/125

Gilgen, Müller & Weigert (GMW) GmbH & Co. KG

Am Farrnbach 4A | 90556 Cadolzburg
T +49 9103 7129-0 | info@g-mw.de



www.g-mw.de

GMW Data Sheet Soneil, October 2025



Multifunctional test device

TG Polaris

An indispensable
companion for
electricians,
service technicians,
and inspectors.

Smart, handy and amazingly versatile: Highest precision and reliability for professional measurements.

Testing according to:

DIN VDE 0100-600, DIN VDE 0105:100, DIN VDE 0113-1, DIN EN 50678 (DIN VDE 0701),
DIN EN 50699 (DIN VDE 0702) sowie DIN EN 62353 (DIN VDE 0751).

www.g-mw.de

The All-In-One Testing Device



Technical Highlights

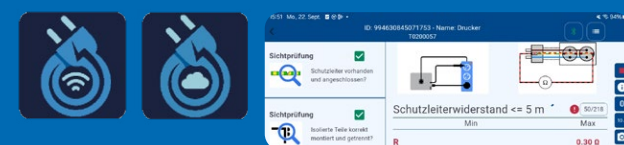
- Ergonomic and compact Design
- Testing according to:
 - DIN VDE 0100:600 (IEC60364.6)
 - DIN VDE 0105:100
 - DIN VDE 0113-1 (EN 60204-1)
 - DIN EN 50678 (DIN VDE 0701)
 - DIN EN 50699 (DIN VDE 0702)
 - DIN EN 62353 (DIN VDE 0751)
- Innovative app control for iOS and Android, one device for installations and electric devices
- Integrated magnetic hold for tablet, also suitable for smartphones
- Default testing sequences for installations devices, machines and objects (work equipment like ladders, shelves etc.)
- Individual creation of testing sequences for installations, devices, machines and objects
- Low impedance measurement
- Insulation measurement
- Innovative measurement of loop impedance and network impedance in one measurement process behind RCD
- Measurement of residual current, leakage current and phase current
- Touch voltage, phase voltage and phase sequence
- RCD testing of types A/B/B+/EV/F
- Innovative simulation of RCD frequency up to 1Khz for types F/B/B+
- 3-pole earth measurement
- Measurement of residual voltage
- Measurements in for different Networks: TN, TT, IT
- CAT III 600 V/CAT IV 300 V
- Bluetooth LE (Low Energy)
- Fast polarity reversal
- Simple documentation with photos



Features

- The compact and multifunctional test device TG POLARIS is made for first and repeated inspection, as well as for inspection after repair
- Tree structures for circuits, devices, objects and locations with a simple and revolutionary way to interlink them
- Simple synchronisation with Cloud-Master Server solution
- Individual management of user rights via Cloud-Master Server solution
- Individual configurable customer access for documentations, inspection lists and other evaluations in Cloud-Master
- Complex visual inspections can easily be built and illustrated via procedure manager: ladders, hospital beds, fire doors, shelves, fire extinguishers, and many more
- On basis of standing data a classification of limit value will be done for an easier testing and evaluation according to the applying norm
- Charging of integrated Li-Ion battery via Schuko plug 230V
- USB-C connection can be used for charging of tablet / smartphone
- Individual procedures allow ideal adjusted routines for every day business (optional)
- Protocol-editor allows adjustment of protocol templates (optional)

Software/App



- Remote Master App (Android and iOS) Individual test sequences with unique operating concept for efficient testing and fast documentation.
- Cloud Master server licences enable central access and simple rights and role management.

Depending on the version, with additional functions:

- (Cloud) Pro version, art. no.: 5011100001, 0039361, additionally with database function, import / export function and protocol designer
- (Cloud) Comfort version, art. no.: 5011100002 0039362, additionally with procedure manager and objects
- (Cloud) Comfort + version, art. no.: 501110003 0039363, additionally with catalogue management of master data

Specifications TG Polaris

Produkt standard

DIN EN 61557-16/EN61010 | DIN EN 61326 | CAT III 600 V/CAT IV 300 V

Size, Weight

Size 250 mm x 260 mm x 80 mm (b x h x t)

Weight ca. 1,5 kg

Technical Properties

Mains AC 230 V $\pm$ 10 %

Operating ambient temperature 5 °C ... 40 °C

IP 20



Magnetic tablet holder

Measurements (5% fault of value + 1% fault of range)

Protective conductor resistance, 0,000 Ω ...10,00 M Ω | 3% o.v. v.+ 10 Digits
Low impedance measuring I = 10 - 200 mA DC | U₀ = 7 - 9 V

interface • USB C for charging tablet / smartphone while device is charging on 230 V
• Bluetooth LE/SPP

DIN EN 50678 / DIN EN 50699 | CAT II 300 V

integrated Residual current deactivation Differential current > ca. 20 mA

Leakage current 0,00 mA ... 20,00 mA
U₀ = 230 V AC (max. 2,5 mA)
(internal resistance 1 k Ω)

Differential current according to DIN EN 61557-14 for correct evaluation of harmonic components 0,00 mA ... 40,00 mA AC (limited by residual current deactivation on 20 mA) with differential current clamp (option) DI40: 0,00 mA ... 40 mA AC

Touch current 0,000 mA ... 4,000 mA

Operating voltage 85 - 265 V AC

Protective conductor controlling Voltage N N-PE < 30 V

Power measurement 0 W ... 4 000 W

Voltage measurement probe - probe 0 V ... 440 V AC/DC

Current measurement 0,00 A ... 16,00 A
With current clamp (option) DI40: 0,00 A ... 63,00 A AC

Insulation resistance 0,1 M Ω ... 1000 M Ω | 3% o.v. +10 Digits
I_k < 1,3 mA
U_n = 50 V < 50M Ω
= 100 V < 100 M Ω
= 250 V < 250 M Ω
= 500 V < 500 M Ω
= 1.000 V < 1 G Ω

DIN EN 50678/DIN EN 50699 | CAT II 300 V

PE resistance 3-pol, U_n = 50 V, 25 V,
0,5 Ω ... 49,9 k Ω | 3 % o.v. +5 Digits
45 Hz - 65 Hz

Residual voltage measurement 0 - 150 V/0 - 30 s | max. 600 V

Voltage measurement L-N, L-L, L-PE
0,0 - 600 V AC | 5 % o.v. + 5 Digits

Measurements (5% fault of value + 1% fault of range)

DIN EN 50678 / DIN EN 50699 | CAT II 300 V

$Z_{L/N, L/L, L/PE}$ L - N, L - L, L - PE
0,15 - 1000 Ω | 5 % o.v. + 5 Digits
I_k(400 V) < 2666 A; I_k(230 V) < 1533 A
45 Hz - 65 Hz

$Z_{L/PE (RCD)}$ L - N:
= 0,15 - 1000 Ω | 5 % o.v. + 5 Digits
I_k(400 V) < 2666 A; I_k(230 V) < 1533 A
45 Hz - 65 Hz
L - PE 15 mA:
= 0,45 - 1000 Ω | 5 % o.v. + 10 Digits
I_k(400 V) < 888 A; I_k(230 V) < 511 A
45 Hz - 65 Hz

L - PE 5 mA:
= 0,45 - 1000 Ω | 15 % o.v. + 30 Digits
I_k(400 V) < 888 A; I_k(230 V) < 511 A
45 Hz - 65 Hz

Frequency 15 - 1000 Hz

Rotating field 100 - 600 V
R/L, phase-sequence test

RCD DIN VDE 0100 | CAT III 600 V | CAT IV 300 V

RCD-Type AC/A/B/B+/EV/F/MI

RCD-form general / selective

Touch voltage 25, 50 V

Phase 0°/180°

	Time test		Current time	2in1-Test
	Accuracy	2 % + 3 dig	5 % + 3 dig	5 % + 3 dig
RCD 3-pol	Current type	In/mA	T/ms	In/mA
	AC	5 - 500	300/500	3 - 500
	AC-HW	5 - 500	300/500	3 - 500
	DC	5 - 1000 3-10	300/500 10000	3 - 1000
	AC+DC	5 - 1000	300/500	3 - 1000
	AC-HF	5 - 1000 250/1000 Hz	300/500	3 - 1000 250/1000 Hz
RCD 2-pol*	AC	5 - 500	300/500	3 - 500
	AC-HW	5 - 200	300/500	3 - 200

*from Firmware V1.22