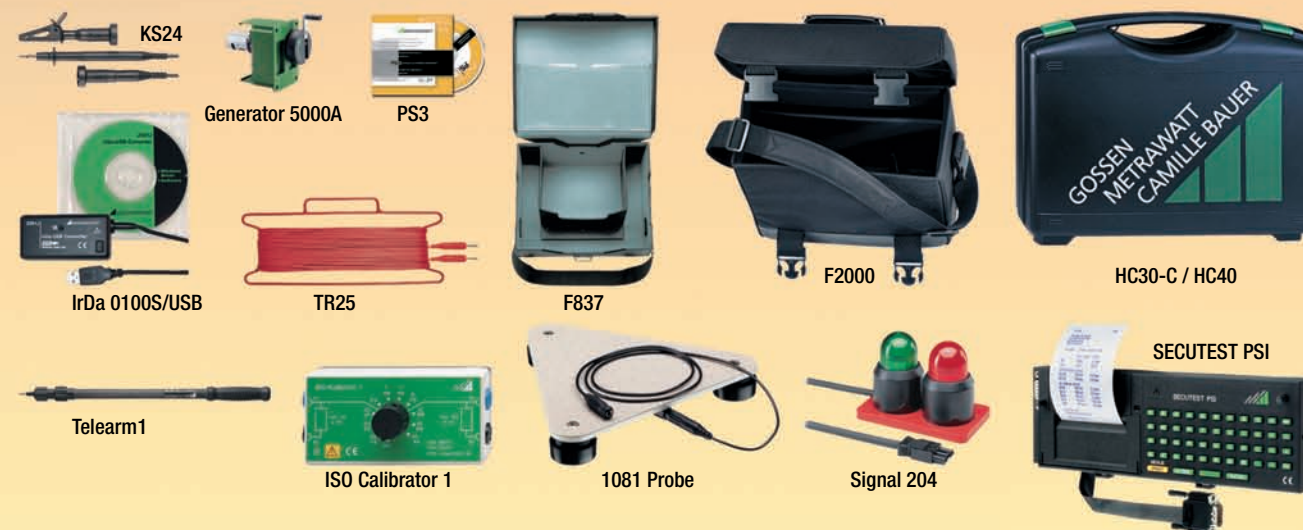


# Complete accessories at a glance

Type	Designation	Article Number	Accessory for METRISO ...						
			5024	1000A	5000	1000D/IR	C	5000A/AK	5000D-PI
KS24	4 m extension cable	GTZ 3201 000 R0001	●	●	●	●	●		
Leadex 5000	5 m extension cable	Z580D						●	●
F837	Ever-ready case	GTZ 3312 000 R0001			●	●			
F2000	Universal carrying pouch	Z700D						●	●
HC30-C	Hard shell case for one test instrument	Z541C					●		
HC40	Hard shell case for two test instruments	Z541D					●		
T/H Sensor	Sensor for temperature and relative humidity	Z541A					●		
IrDa / USB	Interface adapter, IrDA device to USB	Z501J					●		
Rechargeable Battery Set	4 NiCd rechargeable baby cells	GTY 1040 042 E25					●		
NA 0100S	Charger for rechargeable battery set	Z501D					●		
KS-C	Shielded measurement cable set for measurements in GΩ range	Z541F					●		
5000A Generator	Crank generator	Z580A						●	
KY 5000A	2 alligator clips	Z580B						●	●
Guard 5000A	1 guard cable + 1 alligator clip	Z580C						●	●
Telearm1	Telescoping rod for PE measurement	GTZ 3232 000 R0001	●	●	●	●	●		
TR25	Reel with 25 m measurement cable	GTZ 3303 000 R0001	●	●	●	●	●		
1081 probe	Triangular probe for floor measurements per EN 1081	GTZ 3196 000 R0001				●	●		
SECUTEST PSI	PSI printer-memory module	GTM 5016 000 R0001							●
Signal 204	Combination signal lamp on magnetic base plate	Z504D							●
ISO Calibrator 1	Calibration adapter for insulation and resistance measuring instruments	M662A	●	●	●	●	●	●	●
PS3	Universal modular software for test instruments	Z530E						●	
WINPROFI	Simple report generating software	Included					●		●



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# ... up-to-date with our analog devices

## METRISO 5000A

- ☐ Special insulation measuring instrument
- ☐ Straightforward and intuitive operation
- ☐ Guard connection possible
- ☐ Batteries can be replaced by crank generator
- ☐ Special high-voltage measurement cables with clips
- ☐ Can be used all over the world



## METRISO 1000A

- ☐ Can be used all over the world
- ☐ Illuminated measurement points with signal function



## METRISO 5024

- ☐ Exceptionally easy, two-hand operation
- ☐ Clear-cut analog display
- ☐ Useful function combinations
- ☐ Clear acoustic signals
- ☐ Ready to use right away
- ☐ Compact and rugged
- ☐ Can be used all over the world





... creating an entire family

together with existing models



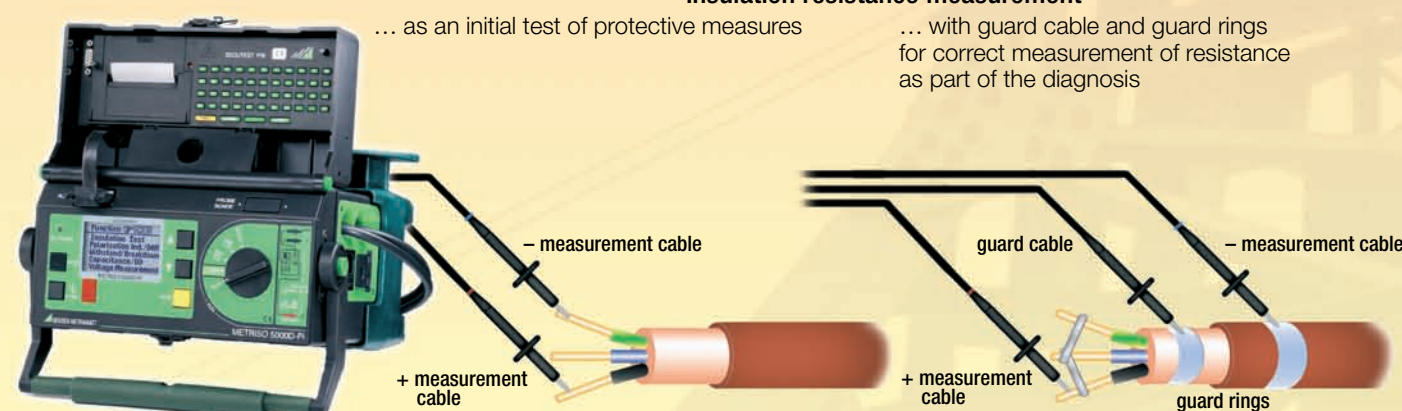
Characteristic Values	METRISO 5024	METRISO 1000A	METRISO 500D	METRISO 1000D/IR	METRISO C	METRISO 5000A	METRISO 5000AK	METRISO 5000D-PI
Measuring voltage	100 / 250 / 500 V	50 ... 1000 V	500 V	D: 100, IR: 250/500/1000 V	100/250/500/1000 V	100/250/500/1000/1500/2000/2500/5000 V		100 V ... 5000 V
Measuring category	II	II	II	II	II	II		III / 600 V; II / 1000 V
Insulation resistance	0.1 ... 400 MΩ	0 ... 400 MΩ	0 ... 3 GΩ	0 ... 30 GΩ	0 ... 100 GΩ	10 k ... 1 TΩ		10 K ... 1 TΩ
Polarization index and absorption ratio	—	—	—	—	—	—		●
Low resist. measurement	0 ... 4 Ω	0 ... 4 Ω	0.01 ... 30 Ω	0.01 ... 30 Ω	0 ... 100 Ω	—		—
Voltage measurement	0 ... 500 V AC/DC	0 ... 1000 V AC/DC	0 ... 500 V AC/DC	0 ... 1000 V AC/DC	0 ... 1200 V AC/DC	0 ... 2000 V AC/DC		0 ... 1000 V AC/DC
Temperature/ humidity	—	—	—	—	with T/H sensor	—		—
Contact current	—	—	—	—	0 ... 10 mA	—		—
Dielectric discharge	—	—	—	—	0 ... 1000 V	—		0 ... 5000 V
Breakdown voltage	—	—	—	—	—	—		50 ... 5 kV / 1 ... 500 V/s
Capacitance measurement	—	—	—	—	—	—		0.01 ... 10 μF
Frequency measurement	—	—	—	—	1.5 ... 400 Hz	—		15 ... 400 Hz
Measurement value memory	—	—	HOLD function for reading measured values		●	—		●
PC interface	—	—	—	—	IrDa	—		RS232
Power supply	4x 1.5 V mignon, IEC LR6 (AA)	6x 1.5 V mono, IEC R20 (D)	6x 1.5 V mono, IEC R20 (D)	6x 1.5 V mono, IEC R20 (D)	4x 1.5 V baby cells, IEC LR14 (C)	6x 1.5 V mono, IEC R20 (D)	Crank generator	Mains, 12 V external or 8 ea. NiMH 9.6 V/3 Ah battery set
Signal	Beeper	Lamp	Lamp	Lamp	—	—	—	—
Approvals	CE	CE	CE UPE GS	CE UPE GS	CE UPE GS	CE UPE GS	CE UPE GS	CE
Dimensions (W x H x D)	98 x 310 x 40 mm	165 x 110 x 125 mm	165 x 110 x 125 mm	165 x 110 x 125 mm	140 x 275 x 65 mm	290 x 140 x 250 mm		320 x 230 x 300 mm
Weight	0.5 kg	1.6 kg	1.85 kg	1.85 kg	1.2 kg	3.4 kg		approx. 4.5 kg
Standard equipment	Carrying pouch, operating instructions, batteries, spare fuse	Carrying pouch, operating instructions	Carrying pouch, operating instructions, batteries	Carrying pouch, operating instructions, batteries	Carrying strap, operating instructions, batteries, CD with Winprofi software	Carrying strap, operating instructions, batteries	Carrying strap, operating instructions, crank generator	Operating instructions, mains/rechargeable batteries*
Applications	Voltage-free devices and equipment, for rugged service applications and laboratory use	Voltage-free devices and equipment and for testing resistance at earthing, protective and equipotential bonding conductors	Voltage-free electrical devices and equipment. For testing resistance at earthing, protective and equipotential bonding conductors and for testing devices under test for absence of voltage. METRISO 1000D and METRISO C only: testing the conductivity of floor coverings for electrostatic discharge			Electrical systems, machines, transformers, cables and equipment used in, for example, locomotives, street cars and ocean-going vessels		Electrical motors, machines, generators and cables
Article number	M540E	M540C	GTM 5040 000 R0001	GTM 5050 000 R0001/2	M541A	M580A	M580C	M5810

\* depending upon order specifications

### Insulation resistance measurement

... as an initial test of protective measures

... with guard cable and guard rings for correct measurement of resistance as part of the diagnosis



### Time-dependent insulation measurements and insulation measurements performed over long periods of time for diagnosis purposes

Measurements of this type are used to identify certain conditions occurring at insulation and dielectric materials.

The appropriate direct voltage is applied to this end for a long period of time, and resulting resistance values are documented at specified intervals. There are several different variants of this type of measurement which have been developed for various reasons by their respective users. Some of them have been created by specific companies for certain applications, and we are thus unable to provide comprehensive information here.

### Polarization index (PI):

Polarization index testing is recommended for expansive systems. This procedure involves expanded testing of insulation resistance. Direct measuring voltage from the METRISO 5000D-PI is applied to the insulation for a duration of at least 10 minutes. Measured values are documented after one minute, and after ten minutes. If the insulation is good, the value measured after ten minutes is higher than the value measured after one minute. The relationship between the two measurement values is the polarization index. The charge carriers contained within the insulation material are aligned due to the application of measuring voltage over a long period of time, resulting in polarization. Polarization indicates whether or not the charge carriers contained in the insulation can still be moved, thus allowing for polarization. This, in turn, is an indication of the condition of the insulation.