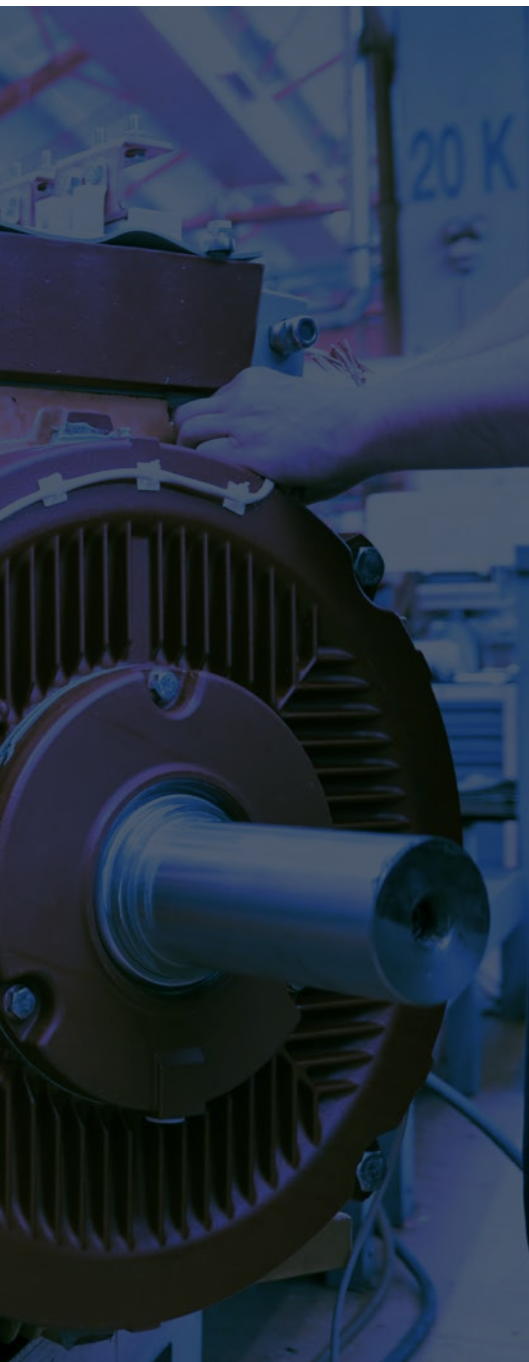


# ALL-IN-ONE INSULATION & MILLIOHM MULTIMETER

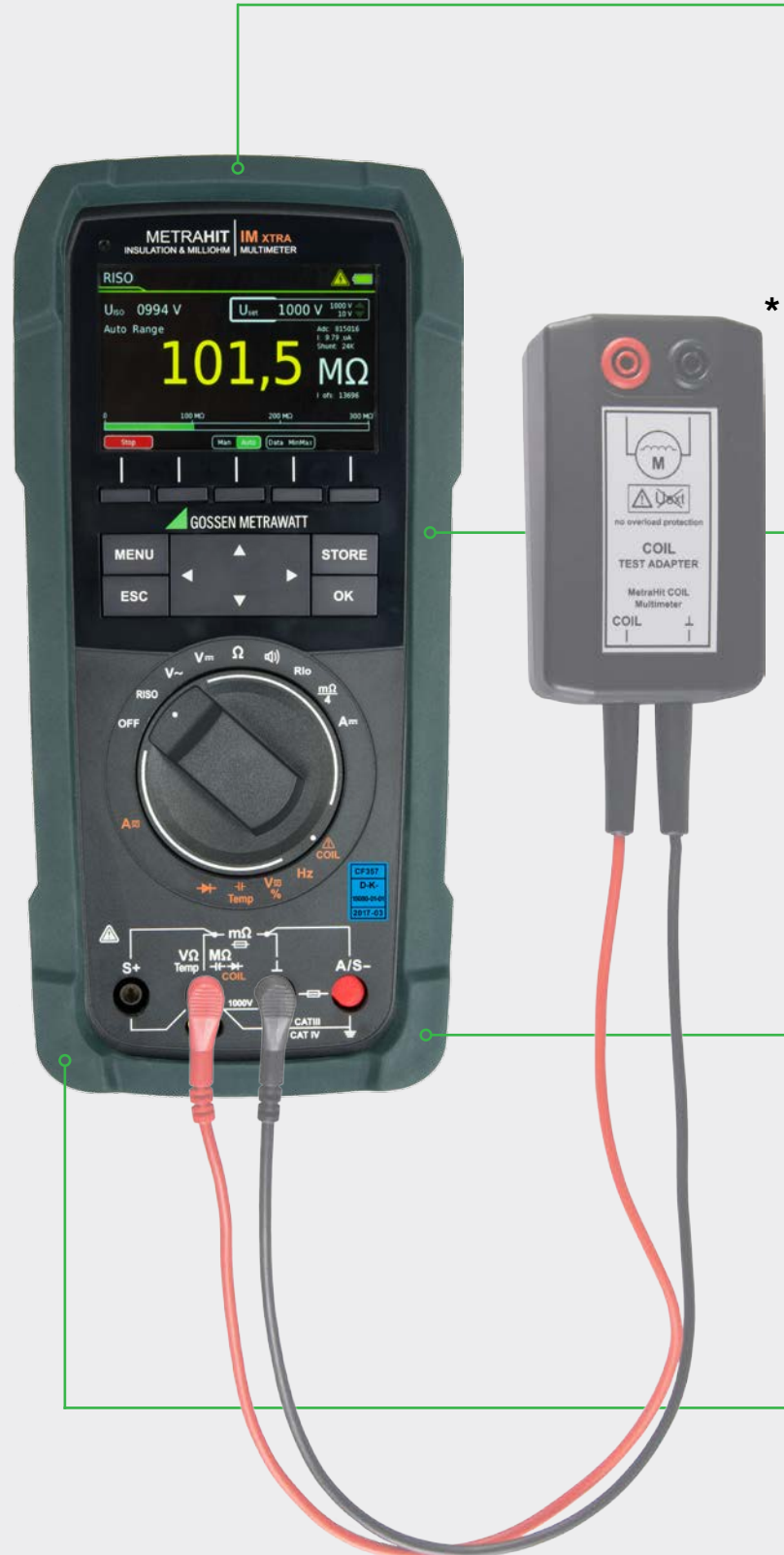
A SINGLE HANDHELD  
INSTRUMENT FOR TESTING  
THE SAFETY AND FUNCTION  
OF ELECTRIC MACHINES



**METRAHIT** | **IM XTRA**  
INSULATION & MILLIOHM | MULTIMETER



Multimeter and Milliohmeter,  
Insulation and Coil Tester for  
Service and Diagnostics at  
Electric Machines and Systems



METRAHIT IM XTRA BT SW Set  
(with Bluetooth and Software IZYTRON.IQ)  
ARTICLE NO. M273C

Information regarding packages and  
accessories is included in the data sheet.



600 V CAT IV  
1000 V CAT III



\* COIL TEST ADAPTER not included in scope of delivery

# METRAHIT IM XTRA

The METRAHIT IM XTRA is a portable, extremely rugged multimeter designed for use in the field.

It's suitable for maintenance, service and diagnostics at electric machines, drive units and systems, for example in automotive, energy and automation applications.

The all-in-one instrument includes all of the measuring functions of a TRMS digital multimeter, an insulation resistance measuring instrument, a milliohmmeter with 4-wire measuring technology and a coil short circuit tester. And thus it's ideal for safety testing and diagnostics at electric and hybrid vehicles, as well as all types of electric machines.

# ADDITIONAL FEATURES

- Bluetooth or WIFI interface
- Color graphic display with analog bargraph
- ABS: automatic blocking sockets
- Including software license for IZYTRON.IQ Business Starter
- DAKKS calibration certificate

# INTERTURN SHORT-CIRCUIT TEST

Surge tests within an inductance range of 10  $\mu$ H to 50 mH (at 100Hz) in combination with the optional COIL TEST ADAPTER.

This range corresponds to motors in accordance with DIN standards with power ratings of roughly 15 kVA to 80 MVA.

A universal adapter for motors with medium power ratings is in preparation.

# MILLIOHM MEASUREMENT

- Kelvin connection for 4-wire milliohm measurement. Compensates for influences resulting from cable and contact resistances which mustn't be neglected when measuring very small resistances. Measuring current can be set to 200 mA or 1 A. Measurement of contact resistances, for example at welded and riveted joints and on aircraft outer skins (lightning protection and wick test), or equipotential bonding is measured in accordance with UN ECE R100 in hybrid and electric vehicles.



- 2-wire  $R_{low}$  measurement with 200 mA test current. Low-resistance measurement per EN 61557-4 / VDE 0413, part 4, for earth, protective and equipotential bonding conductors.

# SPECIAL FEATURES

- **Modular power supply**  
Standard quick-change rechargeable lithium battery, optional WPC module for inductive charging and mains module with USB port, module replacement without interrupting the measuring circuit thanks to touch protected module socket.
- **Push/print function**  
Transfers measured values to application software by simply pressing a key
- **Programmable sequences**  
Test routines with data storage
- **Probe with keys**  
Start/stop and store

# ALL-IN-ONE

All relevant safety tests and multimeter functions for troubleshooting and diagnostics at electric machines in a single handheld instrument:

- Insulation measurement up to 3.1 G $\Omega$  with max. 1 kV
- 4-wire milliohm measurement with Kelvin clips/probes
- Coil interturn short-circuit test with 1 kV test voltage
- Extensive multimeter measuring functions

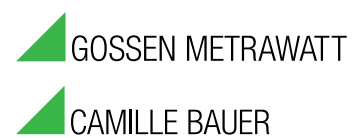
# INSULATION RESISTANCE MEASUREMENT

- Insulation resistance measurement up to 3.1 G $\Omega$  with detection of interference voltage; test voltages: 50 V, 100 V, 250 V, 500 V and 1000 V
- EN 61557-2 / VDE 0413-2
- DAR: dielectric absorption rate
- PI: polarization index

# MULTIMETER FUNCTIONS

- Multimeter for:  $V_{AC, DC, AC+DC, FIL}$ ,  $A_{AC, DC, AC+DC, FIL}$ , Hz,  $\Omega$ , F,  $^{\circ}F/^{\circ}C$ , continuity/diode, %, RPM, low-pass filter
- TRMS AC / AC+DC measurement for current/voltage up to 10/100 kHz
- Data hold function
- Data logger
- Measuring category: CAT III 1000 V / CAT IV 600 V

**GMC INSTRUMENTS**



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