

ALL-IN-ONE

PROFITEST PRIME

THE ALL-IN-ONE TEST
INSTRUMENT FOR MACHINES,
INDUSTRIAL SYSTEMS,
SWITCHGEAR, WIND POWER
TURBINES AND MUCH MORE



PROFITEST | PRIME
INDUSTRIAL | TESTER



Protective measures in electrical systems are intended to prevent bodily injury due to accidents involving electrical current.



PROFITEST PRIME

ALL-IN-ONE

The PROFITEST PRIME is the first all-in-one test instrument in AC and DC networks for electrical systems, machines, switchgear, industrial equipment, wind power turbines, power generators and e-mobility.

Thanks to its wide range of applications and numerous test options, investment costs for the required test technology are significantly reduced and the return on investment will be achieved early.

All measuring tasks necessary for electric machines and systems can be performed without any time-consuming replugging of the measurement cables. This saves a great deal of time.

PROFITEST PRIME uses the same intuitive operating concept as the PROFITEST MASTER series. Thus the PROFITEST series provides users with quick and familiar handling. Compatibility with the PROFITEST series is assured by the uniform operating concept.

Comprehensive data management from the creation of the system structure right on up to report generation ensures consistent and lasting administration of customer data and measured values.

COMPLIANCE WITH LAWS, REGULATIONS AND STANDARDS MADE EASY

Testing the effectiveness of safety measures in electrical systems is necessary in many applications and is required in accordance with legislation and regulations set forth by official authorities, operating companies and insurance companies.

Standards-compliant and safe – the PROFITEST PRIME series implements all measuring tasks safely and in compliance with the standards, and it makes testing quick and safe for electricians and other authorized persons in accordance with a variety of different application and product standards, for example:

- DIN VDE 0100-600 / IEC 60364-6
- VDE 0113-1 / DIN EN 60204-1
- VDE 0126-23 / DIN EN 62446
- DIN VDE 0105-100 / EN 50110-1
- VDE 0660-600-1 / DIN EN 61439-1
- VDE 0122-1 / DIN EN 61851-1

PROFITEST PRIME
ARTICLE NO. M506A

PROFITEST PRIME AC
ARTICLE NO. M506C

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

YOUR ADVANTAGES

■ INNOVATIVE, GLOBAL OPERATING CONCEPT

Quick access to measuring and test functions via the rotary switch and softkeys

■ UNIQUE STORAGE CONCEPT

Creation of system structures – customers, systems, machines, distributors, RCDs, IMDs, RCMs, electrical circuits, earth electrodes, equipotential bonding rails, operating equipment and individual measuring points

■ UNIVERSAL INTERFACE

Bidirectional data exchange
Connection of a barcode scanner as well as temperature and humidity sensors,
Bluetooth/USB: push-print function

■ USER-FRIENDLY

No time-consuming replugging of the measurement cables is required – no measuring cable mix-ups thanks to coded plugs

■ PUSH-PRINT FUNCTION

Transmission of the measured value via Bluetooth/USB after measurement has been completed

■ UNIVERSAL USE

Measuring and testing made easy thanks to extensive accessories and integrated rechargeable battery

■ MODERN DATA MANAGEMENT

Comprehensive data management concept in combination with user software including customer and measurement data administration, test sequences, report generation and more

■ TEST SEQUENCES

Preparation of individual test sequences for quick and reliable testing of machines and systems

■ RUGGED HOUSING

Compact, impact-resistant measuring case with trolley mount for easy transport

ALL-IN-ONE



ELECTRICAL SYSTEMS

SAFE TESTING WITHOUT BOTHERSOME REPLUGGING

- Measurement of internal system resistance and fault loop resistance without tripping RCD types A and B
- Low-resistance measurement for protective and equipotential bonding conductors with 200 mA and automatic polarity reversal
- Insulation measurement with rising ramp
- Testing of RCD types A, AC, F, B, B+, EV, MI and G/R, as well as SRCs and PRCs
- Combined RCD test with continuously rising ramp, time to trip, tripping current



INDUSTRIAL SYSTEMS

SAFE TESTING WITH MEASURING CATEGORY CAT IV

- Measurement of internal system resistance and fault loop resistance with high test current up to 690 V AC / 800 V DC without tripping RCD types A and B
- Low-resistance measurement for protective and equipotential bonding conductors with 25 A
- Testing of residual current monitoring devices (RCMs)
- Measurement of leakage and differential current
- Measurement of temperature and humidity



SWITCHGEAR / MACHINES

SAFE TESTING WITH AC HIGH-VOLTAGE: 2.5 KV, 500 VA

- Work safety concept for the inspector in accordance with DIN EN 50191 and EN 61557-14 with indicator lamp, emergency stop switch and key switch
- Variably adjustable test voltage/current
- Variably adjustable test duration and rise time (ramp)
- Leakage current (touch current) via 2 kΩ load
- Residual voltage measurement
- Pulse control mode for quick troubleshooting

CONNECTING INTELLIGENCE

A NEW DIMENSION OF TEST TECHNOLOGY

QUICK AND EASY SETUP OF COMPLEX STRUCTURES AND TESTS

IZYTRONIQ is newly developed test software with which the entire testing scenario can be visualized, managed and documented in an audit-proof, instrument-independent fashion. And thus for the first time ever, you can combine and document measurement and test data from various test instruments and multimeters into a single test.

- **INTELLIGENT** – IZYTRONIQ is revolutionizing the way you work with your test equipment.
- **SECURE** – audit-proof test documentation
- **EFFICIENT** – quick test documentation
- **SIMPLE** – intuitive operation, simple and easy to understand
- **FLEXIBLE** – can be subsequently expanded

For more information visit www.izytroniq.com

IZYTRONIQ



PHOTO VOLTAIC AND WIND POWER PLANTS

SAFE TESTING IN AC/DC SYSTEMS

- **Voltage measurement (open circuit U_{oc}) 1000 V AC/DC**
- Low-resistance measurement for protective and equipotential bonding conductors with 200 mA, as well as automatic polarity reversal and 25 A
- Measurement of internal system resistance and fault loop resistance with high test current up to 690 V AC / 800 V DC without tripping RCD types A and B
- Measurement of short-circuit current I_{sc} with short-circuit switch
- Insulation measurement with rising ramp
- Varistor response test with rising ramp and variable test current

Optional accessories may be required depending on model.



POWER GENERATORS

SAFE TESTING OF IT SYSTEMS AND IMDS

- **Testing of IT systems with up to 690 V**
- Testing of insulation monitoring devices (IMDs) with up to 690 V
- Type B RCD testing, time to trip and tripping current up to 440 V
- Evaluation of the IMD's response characteristics by means of manual or automatic measuring sequence
- Measurement of displacement voltage
- Measurement of internal system impedance with high test current
- Low-resistance measurement with 200 mA and automatic polarity reversal



E-MOBILITY

SAFE TESTING WITH E-ADAPTER

- **Testing of RCD type EV (electric vehicles) with direct residual current – continuously rising ramp, time to trip, tripping current**
- Integratable test sequence for the simulation of vehicles (CP), cables (PP) and errors at electric charging stations and wall boxes
- Measurement of internal system resistance and fault loop resistance with high test current up to 690 V AC / 800 V DC without tripping RCD types A and B
- Low-resistance measurement for protective and equipotential bonding conductors with 200 mA and automatic polarity reversal
- Insulation measurement with rising ramp

ADDED VALUE – BY GOSSEN METRAWATT

CALIBRATION CENTER

Calibration as a standard feature is an essential QA factor for professional test equipment monitoring. Our calibration center is accredited per DIN EN ISO / IEC 17025 as a DAkkS calibration lab under registration no. D-K-15080-01-01.

Our services:

- DAkkS calibration
- Factory calibration
- Test equipment monitoring
- Verification of energy meters at our state-approved test laboratory



SERVICE CENTER

In order to assure that your measuring and test instruments are always ready for use, the employees at our GMC-I Service Center complete any necessary repairs quickly, reliably and economically.

Our services:

- Repair services executed by qualified personnel
- Rental instrument service
- Replacement parts for a long service life
- Update service for reliable measuring and testing in the future as well



TRAINING CENTER

Ongoing qualification enjoys top priority, because complex measuring tasks, standards and regulations are subject to continuous change. Our instructors are experienced experts who are familiar with the requirements based on their own actual practice and always keep themselves up to date.

We can provide you with:

- Training at GMC-I's training center
- Training on-site at your location
- Individualized training concepts customized to meet your needs
- Webinars on selected topics



PRODUCT SUPPORT

Our product support department makes numerous support services available, regardless of whether you need to solve a problem with a product, require on-site technical support, want help with one of our software products or are seeking technical advice regarding standards or measuring applications.

We can provide you with:

- Telephone and e-mail support for technical questions and problems
- Consultation concerning applicable standards and products
- Software support
- Extensive FAQs



HIGHLIGHTS

The PROFITEST PRIME is the most versatile and future-proof test instrument on the market today.

Intuitive Operation

Efficient Work

Standards-Compliant Testing

Legally Secure Documentation

ONE INSTRUMENT FOR EVERYTHING AND INTERNATIONAL TESTING

WE MAKE SURE THAT YOU SAVE TIME AND MONEY.

- As single test instrument for a broad range of applications
- All measurements without any bothersome replugging of the measurement cables
- Interchangeable test tips on the measurement cables
- Language genius – can be used all over the world

ONE INSTRUMENT FOR STANDARDS-COMPLIANT TESTING

WE KEEP YOUR PROFITEST UP TO DATE FOR A LONG PERIOD OF LIFETIME.

- Future-proof thanks to firmware and standard updates
- After sales service provided for a long period of lifetime
- DAkkS calibration certificate included
- User support for testers, software and applications

ONE MEANS A SINGLE DOCUMENT

WE MAKE SURE THAT YOUR REPORT IS QUICK AND EASY TO GENERATE.

- Cascadable, future-proof software concept
- Modern data management by means of customer and measurement data administration
- Creation of system structures – from the system all the way down to the measuring points
- Quick and easy generation of a legally secure report per ZVEH (*German Electric and Electronic Manufacturers' Association*)



ONE PREVENTS OPERATOR ERRORS

WE MAKE SURE THAT YOU CAN TEST AND MEASURE RELIABLY.

- Easy operation with rotary switch
- Predefined test sequences for structured testing
- Coded plugs assure error-free testing
- On-site help thanks to help function with wiring diagrams
- Measuring category: 600 V CAT III / 300 V CAT IV



GMC INSTRUMENTS

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