

# RELIABLY MINIMIZING RISK OF FAILURE

TEST INSTRUMENT FOR EVALUATION, MAINTENANCE AND INSPECTION OF BATTERY SYSTEMS AND UNINTERRUPTIBLE POWER SUPPLIES (UPS)









Battery tester for measurement of internal resistance, voltage up to 600 V and charging as well as discharging current



# RELIABLY MINIMIZING RISK OF FAILURE

# USER-FRIENDLY, PROFESSIONAL MAINTENANCE OF BATTERY SYSTEMS

Battery systems, such as those used in uninterruptible power supplies (UPS), are essential constituents of critical applications targeted at minimizing the risk of failure and assuring smooth operation of, for example, medical facilities, or for supplying electrical power to computer centers.

The METRACELL BT Pro is a universal, portable and multifunctional test instrument for the evaluation and maintenance of battery systems and uninterruptible power supplies, which are based primarily on lead-acid accumulators.

Lead batteries account for more than 75% of all currently used, rechargeable energy-storage devices. Due to the fact that large capacities must be kept available in some cases, several battery blocks are usually connected to each other. However, since the individual blocks are connected in series, a defective block, whose inner resistance is too high, increases charging voltage to neighboring blocks, thus reducing the service life of the entire string.

The METRACELL BT Pro is capable of recording voltage (block voltage up to 24 V DC), as well as electrical and electrochemical resistance of battery blocks, as a reference measurement during initial start-up and periodic testing. Furthermore, overall voltages of up to 600 V DC can be measured and interval recordings [measuring of voltage and current] can be conducted – e.g. during discharging. The instrument stores up to 300,000 data records which can be managed with the included battery management software, and can be read out in the form of expressive reports.

Battery temperature and acid density can also be measured with the help of optional sensors.

# INTUITIVE



- Simple and reliable user prompting thanks to navigation via keys and a lean menu structure
- Plain text display and high-contrast visualization of measurement results
- Definable test routines with auto-save
- Acoustic indication of measurement results

# **RELIABLE**



- Compact and impact-resistant thanks to ABS housing with additional rubber holster
- Can be attached to one's own belt or the included neck strap for convenient carrying
- Battery operation for up to 10 hours
- Reliable storage of all measurement data in the instrument and the test software

# **TECHNICALLY DIVERSE**



- Early diagnosis of possible damage to storage batteries by means of measuring AC+DC inner resistance
- Large internal memory (storage of 300,000 data records)
- Voltage measurement laid out for the acquisition of individual and overall voltages up to 600 V (CAT III)

# **FLEXIBLE**

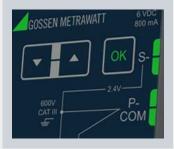


- Integration of all relevant parameters such as voltage, resistance, current, temperature and acid density
- Intuitive software for display, storage and documentation of all measured values

# **HIGHLIGHTS**

## **EASY OPERATION**

Simple and reliable user prompting thanks to navigation via keys and a lean menu structure



## RUGGED **HOUSING**

Compact and impact-resistant thanks to ABS housing with additional rubber holster



### **CONVENIENT CARRYING**

Thanks to its compact design, the measuring instrument can be conveniently attached to the technician's belt or the included neck strap.



### **DIGITAL INTERFACE**

For data export as a CSV file and for connection to external accessories (via Bluetooth or infrared)



# **FEATURES**

### RELIABLE BATTERY TESTING - SIMPLE VISUALIZATION

### **Measured Quantities**

Block voltage: up to  $\pm$  24.5 V DC Overall voltage: ± 600 V DC

 $\pm 300 \text{ VAC}$ AC voltage: Resistance: up to  $1000\,\text{m}\Omega$ 

(via CP1800 current clamp) **Current:** 

(via METRATHERM 2 Temperature: temperature sensor)

Electrolyte density: (via DMA35 acid density

sensor from Anton Paar)

#### **Hardware**

- Connector sockets for voltage and 4-wire resistance measurement
- Bluetooth interface
- RFID scanner
- Infrared interface for data transmission from, for example, an acid density meter (DMA35)
- Rubber holster
- Carrying strap

#### Software

- Database software included
- Graphic representation of measured values
- Comparative display of measured values (block and time-related)
- Data records can be read in and out
- Report generation
- A library of battery types can be set up

# SCOPE OF DELIVERY / ACCESSORIES

# REGARDLESS OF THE TESTING APPLICATION - YOU'RE ALWAYS WELL-EQUIPPED WITH THE METRACELL BT PRO

### INCLUDED IN THE PACKAGE (ARTICLE NO. B100B):

BATTERY TESTER

METRACELL BT PRO

TEST CASE

for safe storage of the test instrument and accessories

CHARGER

The Metracell BT Pro is battery operated and a suitable charger is included in the scope of delivery.

MEASUREMENT CABLES INCLUDING ALLIGATOR CLIPS

Cable set for connection to the test instrumen

#### SPECIAL KELVIN PROBES

for measuring internal resistance with 4-leads

### OPTIONALLY AVAILABLE:

**CURRENT CLAMP CP 1800** 

for measuring charging and discharging current

**TEMPERATURE SENSOR METRATHERM 2** 

for measuring battery temperature and ambient temperature

### 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



### 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-20313-01-01.

#### Our services:

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



### 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



### **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





# **GMC** INSTRUMENTS



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