

FIND CABLE FAULTS – DON'T LOOK FOR THEM

PINPOINTING FAULTS IN CABLES WITH
LENGTHS OF UP TO 14 KM



METRACABLE | **TDR PRO**
TIME DOMAIN | REFLECTOMETER



Time Domain Reflectometer for Testing
Cables with Lengths of up to 14 km



FIND CABLE FAULTS – DON'T LOOK FOR THEM

The METRACABLE is a handy, compact time domain reflectometer for pinpointing faults in all types of cables without service, for example two-core, coaxial and power cables. It has a very short minimum resolution and a range of up to 14 km. Adjustable impedance and the editable velocity factor fulfill all requirements for a successful test setup.

With just a single click, the AUTO-test ensures that impedance, pulse length and measuring range correspond to the cable section under test. This assures quick diagnosis.

High display resolution with background illumination permits accurate fault evaluation of the trace. The included management software maintains the cable database.

Supported Cable Types

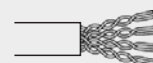
A broad range of various cable types can be tested and possible fault locations can be determined with the help of the TDR method. The METRACABLE is capable of examining cables with lengths of up to 14 kilometers such as the following:



Coaxial cable



Shielded
cable

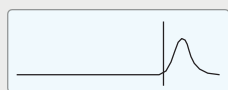


Two-core cable



Stranded
cable

TIME DOMAIN REFLECTOMETER



Open End



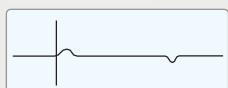
Tap



Short Circuit



Splice



Split/Resplit



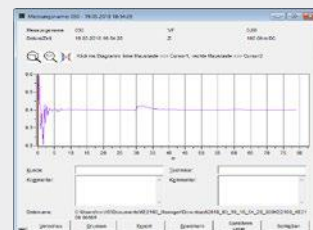
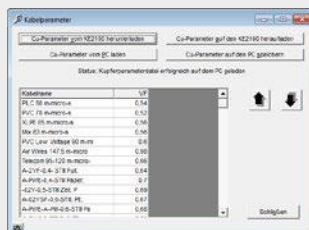
Water in Cable

Time domain reflectometry, abbreviated TDR, is a method for determining and analyzing propagation lengths and reflection characteristics of electromagnetic waves and signals. Measuring instruments which make use of this method are also known as cable radars.

During the TDR process, the instrument transmits a pulse to the cable which is reflected by cable faults and returned to the instrument. The type of fault can be determined on the basis of characteristic reflection curves. The instrument also indicates the location of the fault – accurate down to approximately 0.3 m.

METRACABLE Manager

Measurement results stored at the METRACABLE can be viewed and evaluated, the internal cable database can be managed and firmware updates can be installed with the help of Metracable Manager PC software. Measurements which have been downloaded and saved to the PC can also be evaluated at a later point in time without the need of establishing a connection with the instrument.



FOR YOUR WORKSHOP EQUIPMENT

we recommend the following new test technology:

METRAFUSE | FDPRO

The **METRAFUSE FD PRO** has been developed for quick identification of fuses and circuit breakers used to protect electrical circuits.

The **METRAFUSE FD PRO** consists of a receiver and an emitter. The emitter is integrated into the electrical circuit under test and generates a modified high-frequency signal for injection into the live conductor. The emitter's signal is captured by the receiver. An emitter signal is generated as soon as a fuse or a circuit breaker is detected. The change of state is indicated optically by means of an LED, as well as acoustically.

- Automatic sensitivity adjustment
- For cable lengths of up to several hundred meters
- Separate emitter and receiver units
- Optical and acoustic signaling
- Identification of fuses
- Allocation to electrical circuits
- Optical and acoustic indication
- Compact handheld instrument



METRAVOLT | VT1500

The **METRAVOLT VT 1500** is a 2-pole voltage tester with digital display combined with an integrated continuity, phase, polarity and phase sequence tester. Voltage and resistance values appear in digital format at the LCD. Three LEDs also indicate dangerous touch voltage and phase sequence, a further LED indicates resistance, and continuity is indicated by means of an acoustic signal.

The **METRAVOLT VT 1500** can even be used in the rain thanks to IP 65 protection. It can be safely used with up to 1000 V in CAT IV environments. A switchable load permits the detection of interference voltage and makes it possible to perform an RCD quick test, as well as a startup test for digital electric meters within a range of 0 to 1000 V AC / 1200 V DC.

- Voltage tester
- Continuity tester
- Phase tester
- Phase sequence tester
- LCD for measured value display
- IP 65 protection
- CAT IV 1000 V
- RCD quick test



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 thanks to their own actual practice and always keep themselves up to date.

We can provide you with:

- Training at GMC-I's training center
- On-site training 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



ACCURATE



- For cable lengths of up to 14 km
- Resolution: 0.3 m
- Gain in 6 dB steps
- Accuracy: $\pm 1\%$ $\pm$ pixels at 0.66 VF

INTELLIGENT



- Can be used with all types of symmetrical cables: Two-core, coaxial and power cables
- Auto-setup with just a single click
- Comparison of two measurements

FLEXIBLE



- Shows distance to the fault in meters or feet
- Management software included
- Measurement storage and transmission via Bluetooth
- More than 100 measurements can be stored, download with manager via Bluetooth

RELIABLE



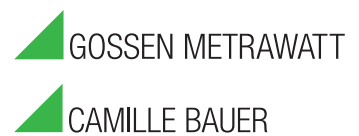
- Easy operation
- Graphic display with background illumination
- Rugged ABS housing

FORWARD-LOOKING



- Quick pulse for short dead zone
- Trace freeze function
- Editable cable database
- Operation with four AA batteries (LR6)

GMC INSTRUMENTS



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