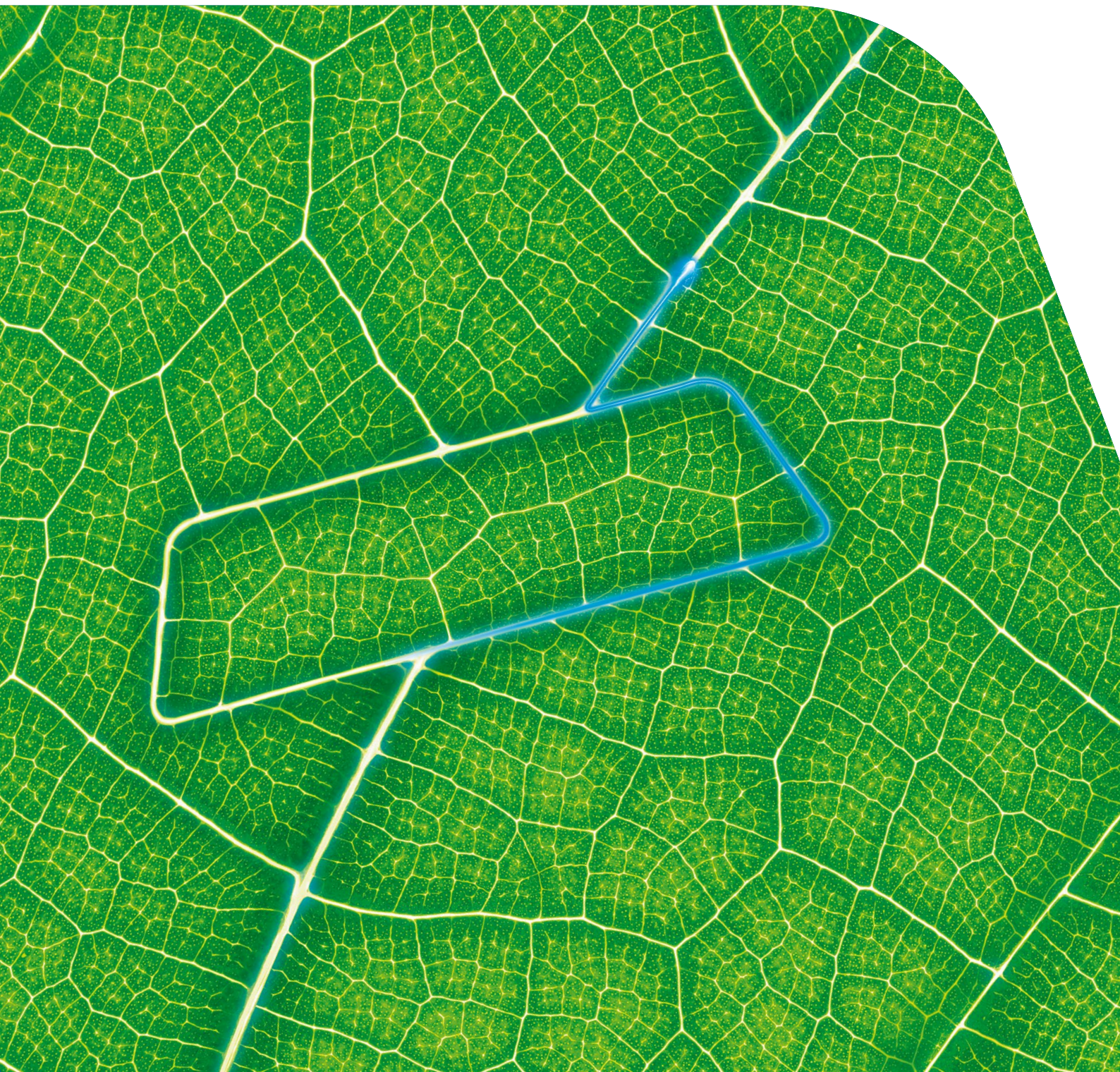


## Product overview





## Table of contents

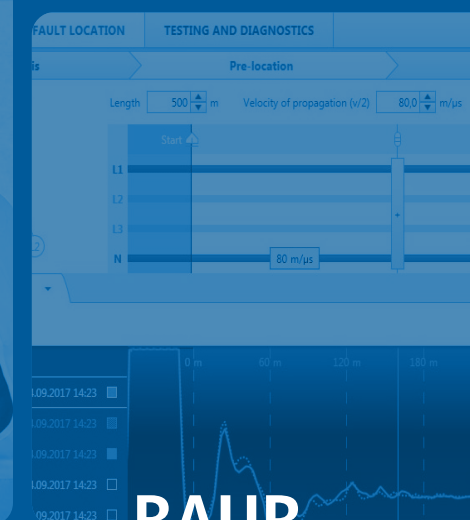
### Cable fault location

Page 04–06



Page 10–11

### Cable test vans and systems



### BAUR software

Page 14

### Cable testing and diagnostics

Page 07–09



### Insulating oil testing

Page 12





# Cable fault location

In power supply, reliability and the careful handling of resources are extremely important. Any faults that occur in cable systems must be determined quickly and precisely. To do this, BAUR offers robust and reliable, yet flexible devices capable of fast and accurate cable fault location in any situation.



Technical information and data sheets for each of our products is available at [baur.eu/cfl](http://baur.eu/cfl)

## Burn down transformers

### ATG 2, ATG 6000

Burn down transformer for reducing the fault resistance

- For use on cable faults that are difficult to locate
- Separate current and voltage regulation on each burn level



Device	Voltage step/burning voltage	Output current
ATG 2	DC 10 kV	32 A
ATG 6000	DC 15 kV	90 A

## Cable and phase identification

### KSG 200

Cable identification system for use on de-energised and live cables

- Pulse current of up to 180 A
- Absolutely reliable identification of the correct cable



## Cable sheath testing and fault location

### shirla

Portable device for cable sheath testing and fault location

- Cable and cable sheath testing up to 10 kV
- Fault pre-location by means of high-resolution resistance measuring bridge
- Step voltage method for cable sheath fault pin-pointing



## Cable fault pin-pointing and tracing

### protrac®

All-in-one cable fault location and tracing system

- Bluetooth connection for wireless operation
- Integrated loudspeaker
- Acoustic/magnetic pin-pointing
- Location of short-circuits and joints
- Tracing with all known methods
- Location of sheath and earth faults



### protrac® Tracing Set

Universal system for line and cable fault location

- Bluetooth connection for wireless operation
- 3D Space coil
- Tracing
- Direct and 45° depth measurements
- Short-circuit fault location with twist and minimum distortion methods
- Audio frequency generator 50W



### TG 20/50 and TG 600

Audio frequency transmitter for cable tracing and fault location

- Automatic and manual impedance adjustment
- High-performance audio frequency transmitter, 50 VA or 600 VA

TG 20/50



### CL 20

Handy device for locating cable routes and metal pipes

- Easy to handle
- Direct indication of the laying depth
- Signal current measurement





# Cable fault location

## Surge voltage generators

- SSG 500-3000**  
Surge voltage generators specifically designed for use in low- and medium-voltage networks
- High surge energy in all voltage ranges
  - High DC burn current
  - Voltage steps can be continuously adjusted from 0 kV to max. output voltage



Device	Voltage	Surge energy	Burn current	Weight
SSG 500	3–16 kV	512 J	480 mA	48 kg
SSG 1100	0–8, 16, 32 kV	1100 J	560 mA	79 kg
SSG 1500	0–8, 16, 32 kV	1536 J	850 mA	120 kg
SSG 2100	0–8, 16, 32 kV	2048 J	850 mA	126 kg
SSG 3000	0–8, 16, 32 kV	3000 J	850 mA	147 kg

## BAUR XL-CFL for fast and efficient cable fault location on long land and submarine cables

### Individual XL-CFL product solutions

A combination of powerful systems and the extensive expertise of BAUR specialists

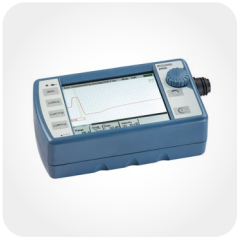
- **Portable devices**  
for cable fault location at multiple locations of use
- **Mobile systems**  
all measurement methods integrated into a single system
- **Stationary XL-CFL systems**  
all measurement methods and application at both ends of long cables

Find out more in the BAUR XL-CFL solution folder



## Time domain reflectometers

- IRG 2000**  
Time domain reflectometer (TDR) up to cable length of 65 km
- Cable fault pre-location using Time Domain Reflectometry
  - Automatic measurement and display of the fault distance
  - Main unit for proven pre-location methods



- IRG 4000 / IRG 4000 portable**  
Time domain reflectometer (TDR) for cable lengths up to 1000 km
- One device – all measurement methods
  - All functions of the BAUR Software 4
  - Fingerprint generation
  - Mapping
  - BAUR Fault Location App
  - Export/import GIS data
  - Insulation resistance measurement up to 1000 V
  - Remote control via WLAN
  - Integrated in a system or as a stand-alone device in a transport case Ideal for use in XL cable fault location

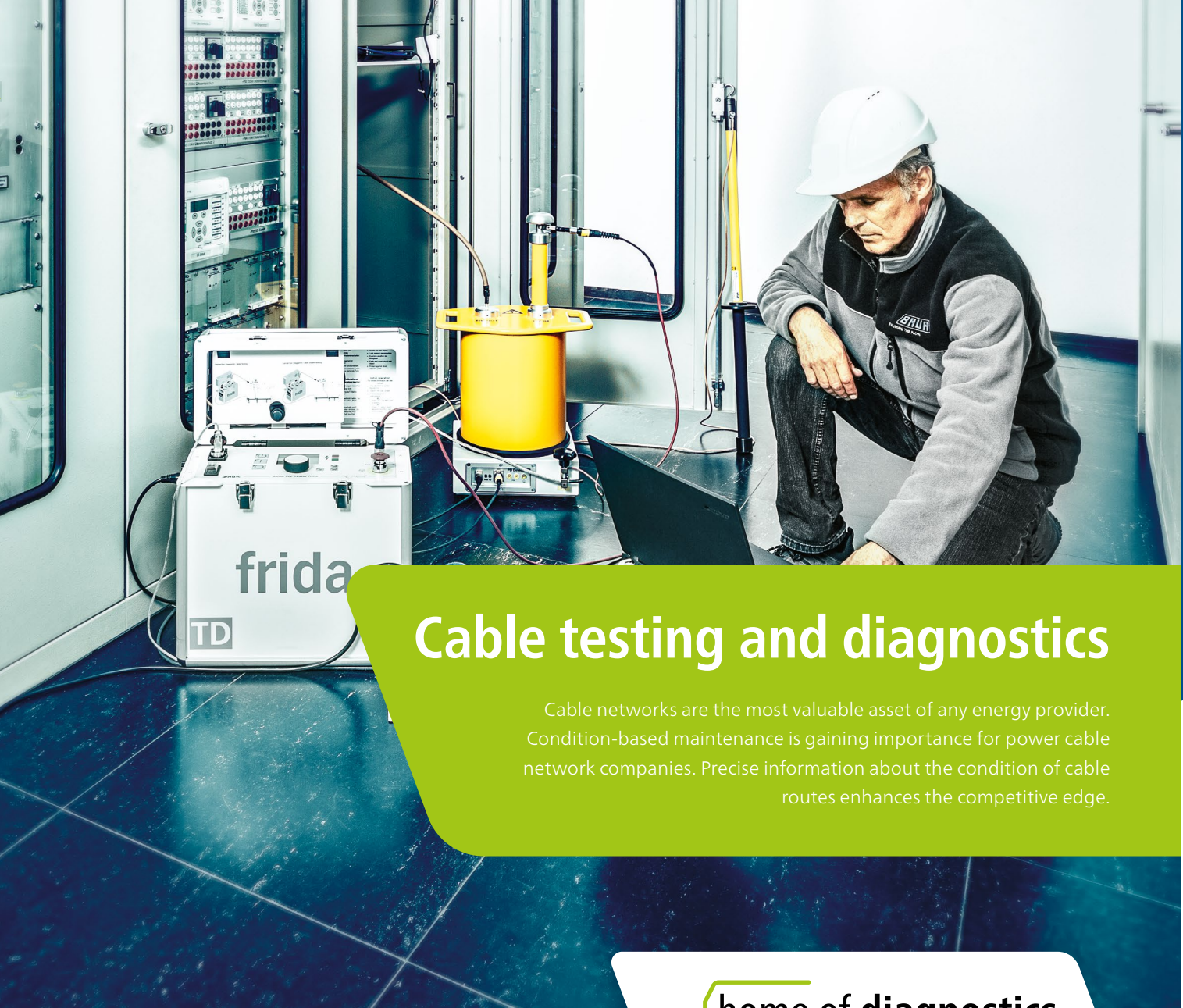


Cable fault location systems

## BAUR software for cable fault location

### BAUR Software 4

Condition-based maintenance of the cable network  
Find out more on pages 14–15



## Cable testing and diagnostics

Cable networks are the most valuable asset of any energy provider. Condition-based maintenance is gaining importance for power cable network companies. Precise information about the condition of cable routes enhances the competitive edge.

home of diagnostics

### AC and DC voltage testing

- PGK HB**  
Voltage test with DC voltage or mains frequency
- On-site DC voltage testing of paper-insulated mass-impregnated cables
  - Voltage test on electrical equipment
  - Cable sheath testing



Cable fault location systems

Device	DC max.	AC max.
PGK 70 HB	+/- 70 kV	55 kV <sub>rms</sub> / 7 mA <sub>rms</sub>
PGK 70/2,5 HB	+/- 70 kV	55 kV <sub>rms</sub> / 50 mA <sub>rms</sub>
PGK 110 HB	+/- 110 kV	80 kV <sub>rms</sub> / 14 mA <sub>rms</sub>
PGK 110/5 HB	+/- 110 kV	80 kV <sub>rms</sub> / 66 mA <sub>rms</sub>
PGK 150 HB	+/- 150 kV	110 kV <sub>rms</sub> / 9 mA <sub>rms</sub>
PGK 150/5 HB	+/- 150 kV	110 kV <sub>rms</sub> / 50 mA <sub>rms</sub>
PGK 260 HB	+/- 260 kV	190 kV <sub>rms</sub> / 9 mA <sub>rms</sub>

- PGK 50 E / PGK 80 E**  
DC HV tester for medium-voltage cables
- On-site DC voltage testing of paper-insulated mass-impregnated cables up to 50 or 80 kV
  - Voltage test on electrical equipment
  - Cable sheath testing



- PGK 25**  
DC HV tester for use on low- and medium-voltage cables up to 25 kV
- On-site DC voltage testing of paper-insulated mass-impregnated cables up to 25 kV
  - Voltage test on electrical equipment
  - Cable sheath testing





**Portable VLF testing and tan  $\delta$  diagnostics**
**frida**

VLF tester for medium-voltage cables

- VLF cable testing with truesinus® 0.1 Hz to 26 kV<sub>rms</sub> / 36 kV<sub>peak</sub>
- Partial discharge measurement in combination with PD-TaD 62
- Cable sheath testing and sheath fault location


**frida TD**

VLF tester and diagnostics device for medium-voltage cables

- VLF cable testing with truesinus® 0.1 Hz to 26 kV<sub>rms</sub> / 36 kV<sub>peak</sub>
- Integrated dissipation factor diagnostics tan  $\delta$  and MWT with tan  $\delta$
- Partial discharge measurement in combination with PD-TaD 62
- Cable sheath testing and sheath fault location


**viola**

VLF tester for medium-voltage cables

- VLF cable testing with truesinus® 0.1 Hz to 44 kV<sub>rms</sub> / 62 kV<sub>peak</sub>
- Partial discharge measurement in combination with PD-TaD 62
- Cable sheath testing and sheath fault location


**viola TD**

VLF tester and diagnostics device for medium-voltage cables

- VLF cable testing with truesinus® 0.1 Hz to 44 kV<sub>rms</sub> / 62 kV<sub>peak</sub>
- Integrated dissipation factor diagnostics tan  $\delta$  and MWT with tan  $\delta$
- Partial discharge measurement in combination with PD-TaD 62
- Cable sheath testing and sheath fault location


**VLF test and diagnostics systems**
**PHG 80 portable**

High-performance VLF tester for medium-voltage cables

- VLF cable testing with truesinus® 0.1 Hz to 57 kV<sub>rms</sub> / 80 kV<sub>peak</sub>
- Partial discharge measurement in combination with PD-TaD 80
- Cable sheath testing


**PHG 80 portable + PD-TaD**

High-performance VLF tester and diagnostics device for medium-voltage cables

- VLF cable testing with truesinus® 0.1 Hz to 57 kV<sub>rms</sub> / 80 kV<sub>peak</sub>
- Dissipation factor diagnostics tan  $\delta$  in combination with PD-TaD 80
- Partial discharge measurement in combination with PD-TaD 80
- Cable sheath testing


**Portable partial discharge diagnostics**
**PD-TaD 62**

Portable PD diagnostics system

- PD measurements up to 44 kV<sub>rms</sub> / 62 kV<sub>peak</sub>
- PD level detection


**PD-TaD 80**

Portable PD diagnostics system

- PD measurements up to 57 kV<sub>rms</sub> / 80 kV<sub>peak</sub>
- PD level detection


**Online partial discharge diagnostics**
**liona**

Online PD Spot Tester

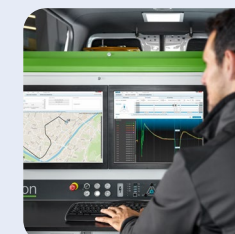
- PD spot test during mains operation (duration: 5–10 minutes)
- PD mapping with iPD transponder during mains operation
- Automatic differentiation between interference and partial discharge with DeCIFer® technology


**Partial discharge pin-pointing**
**tracy**

Partial discharge inductor

- Exact pin-pointing of partial discharge locations


 Technical information and data sheets for each of our products is available at [baur.eu/t-and-d](http://baur.eu/t-and-d)
**BAUR software for cable testing and diagnostics**
**BAUR Software 4**

 Condition-based maintenance of the cable network  
 Find out more on pages 14–15

**statex®**

 Analysis software for determining the statistical remaining life time  
 Find out more on pages 14–15




# Cable test vans and fault location systems

Precise and fast cable fault location, testing and diagnostics of new and aged cable routes – the BAUR cable test vans are suitable for any operation. Fast and reliable. Exactly adapted to individual requirements and cable networks.



Technical information and data sheets for each of our products is available at [baur.eu/ctv](http://baur.eu/ctv)



## Cable test van



- titron®**  
The intelligent test van for cable fault location and diagnostics
- All cable fault location and diagnostics methods in one vehicle
  - Can be flexibly adapted to specific requirements
  - Remote control via BAUR Fault Location App
  - Compact, light version for installation in small vehicles



- transcable 4000**  
Individually configurable test van for cable fault location and diagnostics
- Flexible configurability
  - High redundancy by simply swapping components
  - Cable testing up to DC 110 kV

## Cable fault location systems

- Syscompact 400**  
Cable fault location system
- Proven fault pre-location methods are fully integrated
  - 0–8–16 kV;  
1100 J–2050 J surge energy;  
Burning with up to 850 mA
  - Safe remote operation of IRG with laptop or tablet



- Syscompact 400 portable**  
Mobile cable fault location system
- Portable system
  - 0–8–16 kV;  
1100 J–2050 J surge energy;  
Burning with up to 850 mA
  - Safe remote operation of IRG 400 with laptop or tablet



- Syscompact 4000**  
Cable fault location system
- System with high surge energy for installation in small vehicles
  - 0–8, 16, 32 kV, 1024 J, optional 1540 J, 2050 J
  - IRG 4000 with all fault pre-location methods







Technical information and data sheets for each of our products is available at [baur.eu/ift](http://baur.eu/ift)

## Insulating oil testing

Insulating liquids are an important component of many electrical devices. Highly refined mineral oils, silicone oils, vegetable oils (natural ester), and synthetic ester ensure smooth operation of transformers, medical devices, safety devices or even radar equipment. Insulating materials lose their insulating and cooling properties due to impurities and ageing. This can result in damage and failure of transformers and systems.

The testing of insulating liquids is regulated by national and international standards. You can achieve huge savings potential through optimised use of insulating oils and regular testing to increase the service life of oil-insulated transformers and systems.

### Breakdown voltage test

#### DPA 75 C and DTA 100 C

Fully automatic oil breakdown voltage testers

- Reliable assessment of the breakdown voltage of insulating liquids
- Suitable for silicone and ester liquids
- Suitable for portable and laboratory use



### Dissipation factor measurement

#### DTL C

Oil tan delta and resistivity tester

- Precise quality assessment of insulating liquids based on dielectric material rated values (dissipation factor, conductivity, permittivity)
- Powerful enough for continuous operation in the laboratory
- Straightforward sample handling thanks to automated emptying of cell



#### Report Manager

External USB interface for BAUR oil testers

- Automatic export of measurement logs as PDF and text file

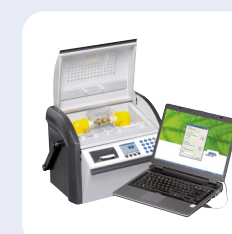


## BAUR software for insulating oil testing

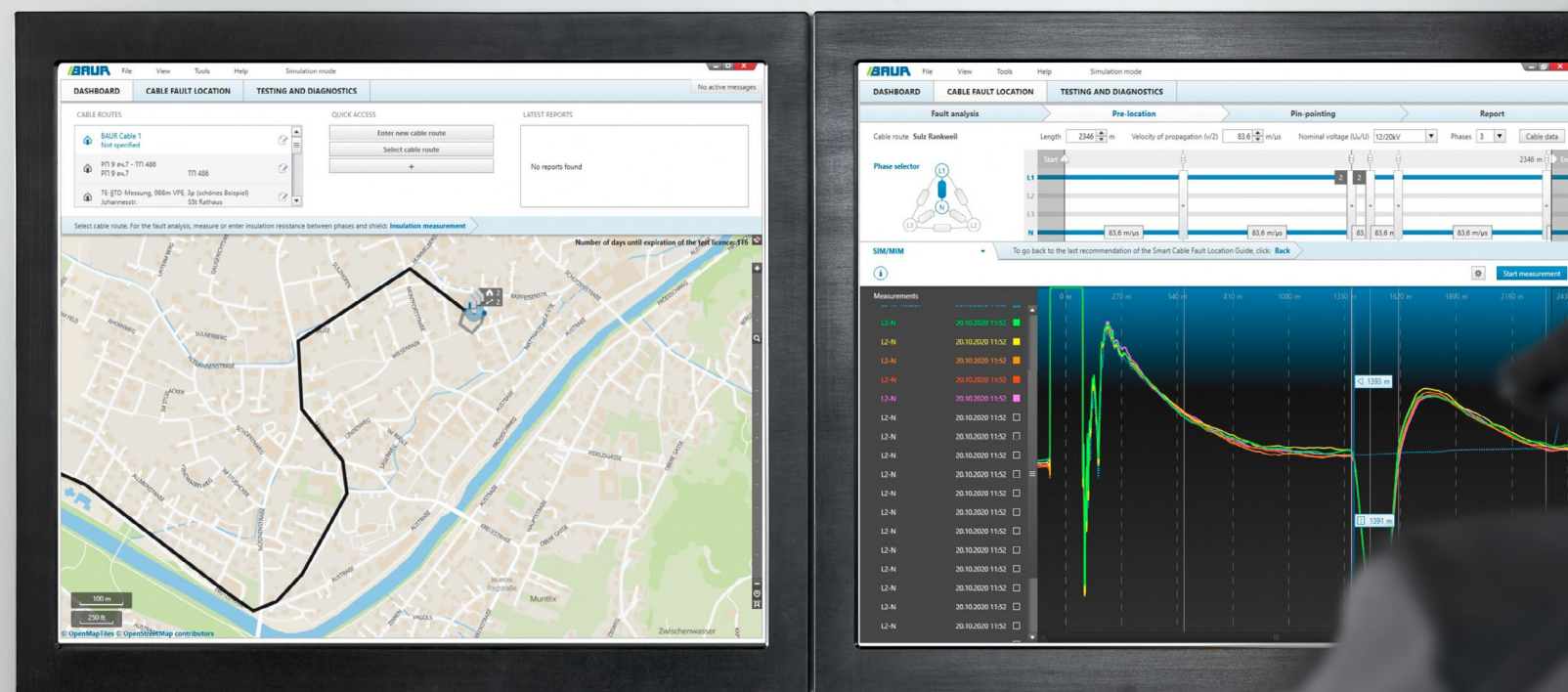
### ITS Lite

Software for measurement data management

Find out more on pages 14–15



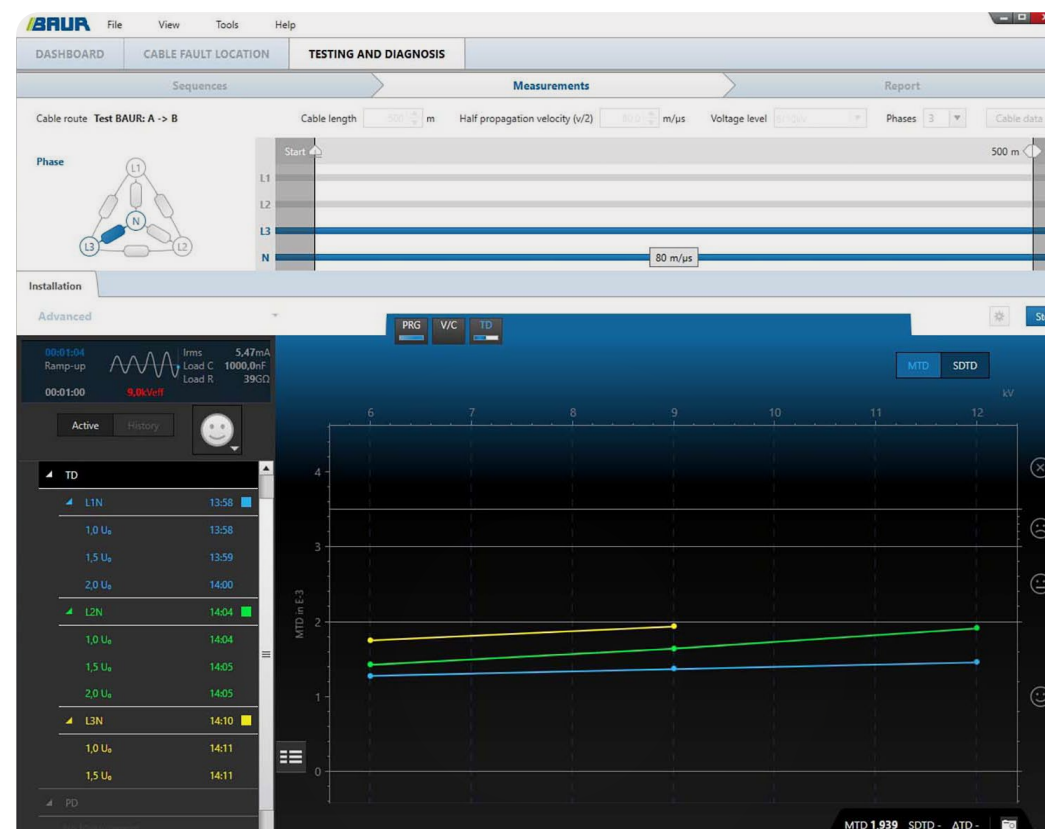




**titron**

## BAUR software

At BAUR, every measurement engineer and asset manager can feel more assured than ever before when it comes to realising the objective of planning repairs in a proactive and cost-optimised way. BAUR's innovative statex® solution is the ideal tool for estimating the life time of cable networks. At BAUR, measurement technology and BAUR software tools are intertwined. The BAUR Software 4 unites cable fault location and cable testing & diagnostics under one roof.



### BAUR Software 4

#### Cable fault location

##### For intuitive cable fault location

- Comprises all measurement methods for precise cable fault location
- Automated sequences guide the operator quickly and safely to the cable fault
- Optimum operator support during cable fault location provided by the Smart Cable Fault Location Guide
- Fast and easy compilation of clear and precise measurement logs

#### Cable diagnostics and testing

##### Condition-based maintenance of the cable network

- Testing, diagnostic measurements, and condition evaluation of medium-voltage cables and electrical equipment
- Support for asset management through condition monitoring of cable networks

### statex®

##### Analysis software for determining the statistical remaining life time

- Determines the speed of ageing and the remaining life time of a cable based on the dissipation factor diagnostics with VLF truesinus®
- Ageing index R for assessing the dielectric losses, and voltage and time stability
- Recommendation for subsequent measurement



### ITS Lite

##### Software for measurement data management

- Transfer and management of analysis results of the DPA 75 C, DTA 100 C, and DTL C oil testers.

□ DPA 75 C, DTA 100 C, DTL C





## Other BAUR Brochures



Cable testing and diagnostics



Cable fault location



Insulating oil testing



Cable test vans and systems



Further product information is available at:  
[baur.eu/brochures](https://baur.eu/brochures)

