



# Tan Delta test attachment

## Integral cable diagnosis system

### Benefits

- ▶ High accuracy
- ▶ Independent of multiple grounding situations
- ▶ Leakage current correction for most precise measurements
- ▶ Simple and comfortable operation (**EasyGo symbol**)

### Details

The Tan Delta test attachment makes it possible to assess the condition of the insulation. Integral ageing phenomena's like e.g. water treeing or moisture content can easily be detected and quantified, making the Tan Delta test attachment the ideal tool to monitor the insulation degradation.

The Tan Delta test attachment can be used as a stand-alone system in combination with SebaKMT's portable VLF sinus systems or can be used in combination with integrated VLF sinus systems in test vans.

Due to the measurement on high potential and placement of the measuring unit (MDU) close to the test object an accurate solution has been obtained with independency of multiple grounding situations.

Data communication takes place via a wireless connection (range  $\geq 75\text{m}$ ) between the MDU unit and control unit (laptop). The EasyGo software ensures easy and comfortable operation and data logging. Moreover test sequences can be easily and intuitively configured.

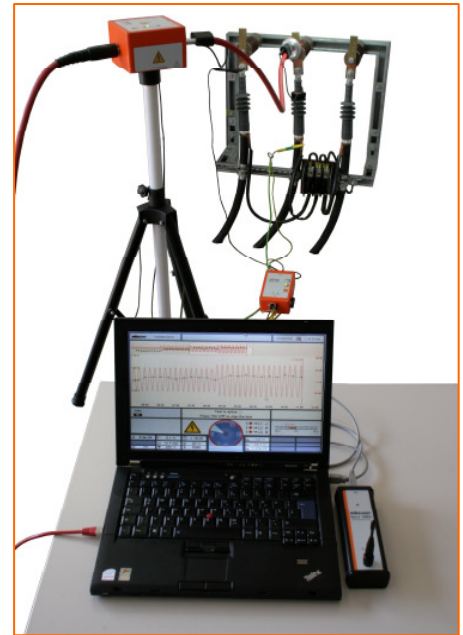
The voltage, current and loss factor  $\tan \delta$  are real-time and graphically displayed during the measurement. Resultantly, weak and critical cables can be detected at an early stage and the voltage stress on such a test object can be reduced to a minimum.

### All benefits at a glance

- ▶ High precision measurement
- ▶ Optional leakage current correction
- ▶ EasyGo operating software (**EasyGo symbol**???)
- ▶ Wireless data transmission
- ▶ Measurement on high voltage potential
- ▶ Low weight and portable

### Options

- ▶ Leakage current correction
- ▶ VLF Sinus 28kV or VLF Sinus 51kV
- ▶



### Technical data

#### Tan $\delta$ measuring range

|                         |   |
|-------------------------|---|
| Measuring range         | $1 \times 10^{-4} \dots 1 \times 10^0$                        |
| Measuring accuracy      | $1 \times 10^{-4}$  |
| Resolution              | $1 \times 10^{-5}$  |
| Frequency               | 0.01 Hz ... 10 Hz   |
| Testable cable capacity | 2 nF ... 3 $\mu\text{F}$<br>(appr. 10 m ... 15 km XLPE cable) |

#### Measuring range and current

|                                       |                           |
|---------------------------------------|---------------------------|
| Measuring range of test unit (MDU)    | 1 $\mu\text{A}$ ... 25 mA |
| Measuring range of diverter box (TCU) | 1 $\mu\text{A}$ ... 1 mA  |

#### Measuring range insulation resistance

|                 |                                |
|-----------------|--------------------------------|
| Measuring range | 1 M $\Omega$ ... 10 T $\Omega$ |
|-----------------|--------------------------------|

#### Power supply

|                          |  |
|--------------------------|--|
| Test unit / diverter box | Rechargeable Batteries                                     |
| Charger                  | 90 V ... 240 V, 50/60 Hz AC<br>(via power cable) or 12 VDC |

#### Operating time

|                             |   |
|-----------------------------|---|
| Test unit (MDU)             | 16 h (operation with TCU)<br>32 h (without TCU)   |
| Diverter box (TCU)          | 24 h  |
| Charging time               | 3.5 h   |
| Operating temperature range | -25 $^{\circ}\text{C}$ ... +55 $^{\circ}\text{C}$ |
| Storage temperature range   | -40 $^{\circ}\text{C}$ ... +70 $^{\circ}\text{C}$ |

#### Weight

|  |         |
|--|---------|
| System (MDU + TCU) with case, tripod, accessories and cables | 12.5 kg |
|--|---------|

#### Dimensions

|             |                    |
|-------------|--------------------|
| System case | 400 x 170 x 330 mm |
|-------------|--------------------|