



WHY TAURUS DIGITRACE ?

- ▣ High sensitivity
- ▣ Automatic capacitance balancing
- ▣ Detects and pinpoints faults **ON -LINE**
- ▣ Indicates and pinpoints mixing of sources
- ▣ High capacity battery for long and continuous operation
- ▣ Immune to 50Hz and its harmonics
- ▣ EMC / EMI compliance
- ▣ Protected with IP 67 pelican casing
- ▣ Portable and easy to operate

DESCRIPTION

DIGITRACE DC 361P simplifies the tracking of ground faults on floating DC systems in power station. It is an advanced sensing system which precisely identifies and pinpoints the complex earth faults on any floating DC system in ON-LINE condition. The fault resistance range is up to 250kΩ. It is capable of finding faults in a maze of noise and other mimicking fault conditions, source of which is perplexing and misleading. It is a portable system comprising of two units : Transmitter unit and Receiver unit.

THE NECESSITY

DC floating System is an important part of any power station. Any earth faults on DC System can disturb the sensitive functioning of control units like trip relays, breaker etc., there by affecting the stability of the power station. Tracing earth faults in offline condition will interrupt the functioning of critical control circuitry and it is highly recommended to have an online DC Earth Fault Locator to find out the faults ON-LINE.



ADVANTAGES

- ▣ High Accuracy
- ▣ Automatic suppression of all noise and leakage currents
- ▣ Metallic shielding to suppress EMI interference and EMC compliance
- ▣ Dynamic measurement
- ▣ Rock steady, reliable and repeatable readings in power station environment
- ▣ High capacity battery for long and continuous

THE PRECIOHM ET is one of the specially designed product by MKS to measure earth resistivity and earth resistance in a power station. These tests are performed based on 4 point (wenner) and 3 point (Fall of potential) methods respectively. All electrical equipments in the substation and power stations are electrically connected to station earth mat with earth electrodes. The earth electrode ensures that in the event over voltage on the system due to system fault or lightning discharges etc, the parts of the equipments which are normally 'dead' as far as voltages are concerned; do not attain dangerously high potentials. An earth electrode will only be effective so long it has a low resistance to the earth and can carry large currents without deteriorating. Thus the resistance of earth electrode should be low to give good protection and it must be continuously measured and monitored in all the substations and power stations.

DESCRIPTION

Preciohm ET is a portable system specially designed to measure earth resistance & resistivity for substations and power stations. Taurus preciohm ET has a wide measurement range (0 to 20 kilo ohms) and is immune to power frequency interference and its harmonics. The instrument is designed to operate in a highly induced environment and to give highly stable, reliable, repeatable readings in the power station with its strong capability of noise & leakage current/voltage suppression. Successfully tested at 765kV Substations.



ADVANTAGES

- ▣ Offline Fault Location
- ▣ Overhead EHV AC Transmission Line Signature Analysis
- ▣ Line Healthiness Analysis and diagnosis
- ▣ Commissioning of new Overhead Transmission Line
- ▣ Virtual Line Patrolling
- ▣ Predicts inhomogeneous points
- ▣ Attaining Optimum Transmission line availability
- ▣ Effective Maintenance of Transmission System
- ▣ All types of faults & inhomogeneities in line will be located accurately in very short time

TAURUS MAX-3 EHF Overhead EHV AC Transmission line Analyzer is a state of the art offline portable kit, capable of detecting accurately any fault on EHV Transmission lines and also helps you to venture beyond, into innovative line signature analysis study, useful in predictive maintenance of Transmission lines.

NEED OF THE HOUR

The currently employed online measuring systems, part of the protective relay apparatus, is executed in real time and designed to trade off accuracy for speed of decision making. Need of high accuracy and dependability to detect the line fault is increasingly gaining importance as the demand is increasing to achieve a near 100% uptime. A stand alone, portable, offline kit capable of finding fault accurately to the tower (non system based, non stress affected), is required not only to accurately find faults, but also to declare line healthy after a short duration of sustained transient fault avoiding rigorous patrolling. A signature analysis study of the transmission line as an extended feature, will help the operation and maintenance team enormously in understanding their line better.

DESCRIPTION

The Max-3 EHF is a revolutionary innovative system significantly minimizes the transmission line downtime and overall line maintenance time. Max-3 EHF is the third generation, one of its kind product that works on the principle of multiple pulse echo co-relation technique, using advanced matrix processors. A single system offers a cost effective monitoring of all AC overhead de energized lines from 66kV to 765kV, providing accurate information on all faults and line signature analysis, which give data of all inhomogeneous points. With this equipment, it is possible to check faults in double circuit highly energized EHT lines with the other circuit in energized condition.



ADVANTAGES

- ▣ Measures impedance along with resistance and Inductance of the transmission line tower footing without isolating overhead earth wire
- ▣ Automatic suppression of all noise and leakage currents
- ▣ Metallic shielding to suppress EMI interference and EMC compliance
- ▣ Dynamic measurement
- ▣ Rock steady, reliable and repeatable readings in induced
- ▣ High capacity battery for long and continuous operation

PREZIOHM TFR is innovative product of MKS designed to measure impedance along with resistance and Inductance of transmission line tower footing without disconnecting the overhead earth wire. The tower earthing has an important influence on a) The effect of lightning strikes on the tower . b) Ensuring the safety of people near tower. PREZIOHM TFR is a high frequency earth tester, used to measure the tower earth resistance to discharge transient frequencies generated due to lightning into the ground ensuring the equipment and personnel are safe from any hazard. Also useful in determining the effectiveness of lightning or surge grounding capacity of any tower by measuring the tower footing impedance.

DESCRIPTION

PREZIOHM TFR is a portable system specially designed to measure impedance and resistance of transmission line tower footing without necessitating removal of top ground wire.

PREZIOHM TFR has a wide measurement range (0to2k ohms) and is immune to power frequency interference and its harmonics. The instrument is designed to operate in a highly induced environment and to give highly stable, reliable, repeatable readings with its strong capability of noise.

TAURUS OHMEGA INSULATION TESTER



ADVANTAGES

- ▣ Automatic suppression of induction and specially designed to operate in highly induced environment.
- ▣ Metallic shielding to suppress EMI interference.
- ▣ Dynamic measurement.
- ▣ Rock steady, reliable and repeatable readings in power station environment
- ▣ High capacity battery for long and continuous operation

THE TAURUS OHMEGA IT is a high end insulation analyser and is specifically designed to operate in a highly induced power station. TAURUS OHMEGA IT is an easy to use portable system capable of testing insulation resistance of transformers, motors, generators, cables, switchgear, capacitors, powerlines, busbars etc. All electrical assets in the power station and heavy industries are insulated from earth. Any imperfection in the insulation can be detrimental and can cause damage to electrical asset and the safety of people. Insulation is subject to many elements that can cause it to perform at a less-than acceptable level. Excessive heat or cold, moisture, vibration, dirt, oil and corrosive vapors can all contribute to deterioration. For this reason, routine insulation testing is necessary.

DESCRIPTION

The OHMEGA IT is a Digital Insulation Analyser with simultaneous indication of Insulation Resistance in Kilo mega ohms, PI INDEX, DAR, Voltage applied, Leakage current, Time elapsed etc. The output is derived with the latest state of the art technique achieving high efficiency and output regulation. The OHMEGA IT comes with various models with test voltages ranging from 5kV to 30kV, range up to 35 TΩ. Apart from standard models available, the option of customized short circuit current is also provided



ADVANTAGES

- Offline Fault Location
- Overhead AC Distribution Line Signature Analysis
- Line Healthiness Analysis and diagnosis
- Commissioning of new Overhead Distribution Line
- Virtual Line Patrolling
- Predicts inhomogeneous points
- Attaining Optimum Distribution line availability
- Effective Maintenance of Distribution System
- All types of faults & inhomogeneities in line will be located accurately in very short time

TAURUS SIGMAX

Overhead Distribution line Analyser is a state of the art offline portable kit, capable of detecting accurately any fault on distribution lines and also helps you to venture beyond, into innovative line signature analysis study, useful in predictive maintenance of Distribution lines.

Need of the hour: The currently employed online measuring systems, part of the protective relay apparatus, is executed in real time and designed to trade off accuracy for speed of decision making. Need of high accuracy and dependability to detect the faulty tower is increasingly gaining importance as the demand is increasing to achieve a near 100% uptime. A stand alone, portable, offline kit capable of finding fault accurately to the pole (non-system based, non-stress affected), is required not only to accurately find faults, but also to declare line healthy after a short duration of sustained transient fault avoiding rigorous patrolling. A signature analysis study of the distribution line as an extended feature, will help the operation and maintenance team enormously in understanding their line better.

DESCRIPTION

The SIGMAX is a revolutionary innovative system significantly minimizes the distribution line downtime and overall line maintenance time. SIGMAX is the third generation, one of its kind product that works on the principle of multiple pulse echo co-relation technique, using advanced matrix processors. A single system offers a cost effective monitoring of all AC overhead de-energized lines from 11kV to 33kV, providing accurate information on all faults and line signature analysis, which give data of all inhomogeneous points.



ACCESSORIES

- ▣ Earthing Cable
- ▣ LI-ION Battery
- ▣ LI-ION Charger
- ▣ 33m-HV Cable (Spare)
- ▣ Stick with 33m HV Cable fixed
- ▣ Connecting cable

HIGH VAC is an induced voltage detecting and measuring device, key usage would be to ensure measuring zero induced voltages post grounding at the work site apart from various other contributions by the kit.

NEED OF THE HOUR


Although induced voltages at times may not be seen as a problem, personal safety should never be taken for granted. Protective grounds are required as per all safety standards whenever work is performed on a de-energised transmission line with aid of dielectric gloves. The proper placement of protective grounds protects the worker from accidental energization of the transmission line. This would include any induced voltages due to nearby energised transmission lines.

A typical method of grounding is sometimes referred to as work site grounding. With this method protective grounds are placed at work site location. Proper selection of ground site and proper connection of the grounds is paramount in providing proper protection for the worker. Voltages of several kV have been calculated and measured. These voltages can be harmful to workers and should be treated with due caution. Detecting and measuring the induced voltage helps you in making suitable preparation and precaution before you commence the work. After grounding it is also preferable to detect no induced voltages exist before commencement of work ensuring proper work site grounding and is the need of the hour.

M.K.SRINIVASAN SYSTEMS PRIVATE LIMITED

Corporate Office & R&D Division

 #33, 17th Cross, Malleswaram, Bengaluru-560 055.

 +91 080 23449185 | +91 94480 61049

 info@taurusmks.com





FEATURES

- ▣ Measure impedance at power frequency for transmission lines.
- ▣ Measure impedance of power cables.
- ▣ Measures positive/negative sequence impedance.
- ▣ Measure Zero sequence impedance measurement.
- ▣ Measure Phase to phase susceptance measurement.
- ▣ Measure Phase to earth impedance measurement.
- ▣ Measure Line to line mutual inductance measurement.
- ▣ Measure Line to line mutual inductance measurement (zero sequence).

TAURUS Z CHECK is an instrument to measure the transmission line parameters. Simple in operation and few steps will determine all parameters required for the commissioning of transmission lines & thus significantly support assuring performance and stability of protection system.


TAURUS Z CHECK operates on the single phase mains supply. About 80 Volts of system frequency is injected in to the transmission line. Voltage current and phase angle are measured based on test conditions. Power system frequency is chosen due to the fact that all protective system operates on the same frequency, and it is also necessary to measure the impedance at power system frequency.

During commissioning and testing of the line for Line impedance measurement both the circuit are kept in de-energized condition (Double circuit lines) and induction or interference is minimum and generally negligible which is due to only crossing of transmission lines. The measured parameters are used to calculate the Line impedance, phase to phase susceptance, line to line mutual inductance.

M.K.SRINIVASAN SYSTEMS PRIVATE LIMITED

Corporate Office & R&D Division

 #33, 17th Cross, Malleswaram, Bengaluru-560 055.

 +91 080 23449185 | +91 94480 61049

 info@taurusmks.com