Voltstik Radio Based Distribution Voltmeters

Safely and accurately measure the primary voltage
Remote display for instant confirmation of the reading
Take Phase to Phase and Phase to Ground measurements
Single stick operation
Holds up to four unique readings

Receiver Display on Hotstick

The Voltstik is a distribution voltage voltmeter designed for use on lines and in substations. This meter is deployed onto a line by using a hotstick and universal chuck adapter. It can measure voltage phase to phase and phase to ground. This high impedance instrument is an excellent choice for solving multiple problems associated with operating a medium voltage system. Its key applications are defined under three groups, safety confirmation of the voltage present, troubleshooting voltage problems and phasing.

Troubleshooting Voltage Problems

The Voltstik provides the ability for the user to measure the potential of any two points within a medium voltage distribution system. Voltage drop along a line can be measured or a check of phase to ground voltage on the primary side of a voltage complaint can determine if the cause belongs to the utility or the customer.

Phasing

The most common use for measuring voltage in a distribution system is measuring the phase to phase voltage. In the past, this has been performed with a dedicated instrument called a "Phasing Set". The SensorLink Voltstik offers advantages to the traditional methods. The Voltstik has an accuracy rating of ±1%, while most phasing sets only read the approximate voltage.

The extension cable used to make the two point connection is rated 40,000 volts DC, with a breakdown voltage of 80,000 volts DC. The housing is made of urethane and built to operate safely, even in severe utility environments.

The only points on the entire meter that conduct a signal are the two ends. This design is the safest method to take a two-point voltage measurement.

The display shows the voltage measurement and continues to update the reading three times per second using a non-licensed radio. The receiver features a five-digit display that shows full scale1-volt resolution. While in the HOLD mode, the display will hold up to four readings.

The remote receiver display gives the user instant confirmation of the reading. The user has the option to hold the receiver in their hands or mount it to a hotstick. This allows the user to keep both eyes and hands on the task of taking the measurement.

Applications

Identifying broken insulators

Measuring voltage drop

Phasing

Troubleshooting distribution circuits

Voltstik

Radio Based Distribution Voltmeters

Model Number	6-133
Description	37 kV Voltmeter
Kit Includes	Model 8-133, 37kV Voltstik Transmitter
	Model 8-121, Radio Receiver Display
	Model 7049, Carrying Case
Range of Operation, Voltstik	
Voltage	0-37,000 volts
Resolution	1 Volt
Accuracy	± 1%, ± 2 Counts
Frequency	
50Hz	47 to 53Hz
60Hz	57 to 63Hz
Mechanical	
Controls	Single button operation
Display	5 Digit LCD
Storage	Four Readings
Weight, 8-133 Assembly	5.77 lbs, 2.62 kg
Weight, 8-121	1.4 lbs, 0.64 kg
Operating Temperature	-22° to +140° F, -30° to +60° C, Lithium battery required for temperatures below -4°F (-20°C)
Housing	Shock resistant molded urethane
Hotstick Mounting	Shotgun or Universal. Hotstick not included.
Battery	9V Alkaline or Lithium (one each per Transmitter and Receiver)
Radio	
Frequency, Region(s) 2 & 3	916.48 MHz
Frequency, Region(s) 1	869.85 MHz
Power	1 miliwatt
Range	50 feet, 15.24 meters

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