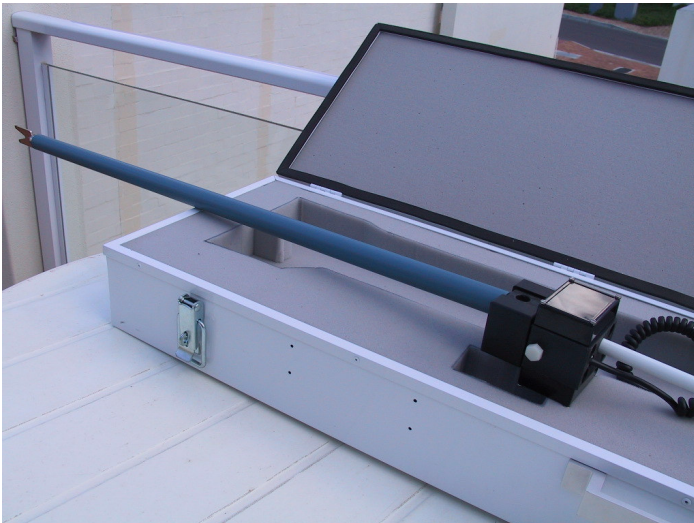


*Is the SAFETY of your ELECTRICAL WORKERS ensured?*

## **SURETECH™ DC/PT 75** *the High Voltage DC Personal Tester for 75kVdc*

### **DC/PT 75 Features**

- ✓ Used on voltages up to 75kV DC to earth
- ✓ Probe resistance 220Mohms
- ✓ Probe length 800mm
- ✓ Probe construction uses very special high voltage resistors, and is designed to withstand four times voltage rating & two times continuous power rating
- ✓ Resistive and capacitive grading is designed into the probe to ensure no corona discharge throughout probe, even before insulating resin is introduced in production
- ✓ Probe radial insulation is made up of FIVE concentric layers of insulation:
  - ✓ 1<sup>st</sup> layer: inner poly carbonate tube containing resin filled resistors
  - ✓ 2<sup>nd</sup> layer: PU resin filling
  - ✓ 3<sup>rd</sup> layer: PVC tube
  - ✓ 4<sup>th</sup> layer: PU resin filling
  - ✓ 5<sup>th</sup> layer: PVC outer tube
- ✓ Various probe tips available, hook, point, catch
- ✓ Handle is supplied with two hand grips for ease of manipulation
- ✓ Insulating stick is 700mm, 12.5mm diam solid glass fibre rod provides extra insulation for user safety
- ✓ Display options (user to specify):
  - ✓ LED for detection threshold
  - ✓ LED flashes out 3 digit voltage
  - ✓ LCD 2line alphanumeric display
- ✓ Buzzer beeps while LED is on, providing audible output as well
- ✓ Earth Terminal stud on probe, connects probe to earth as reference, via curly cord cable
- ✓ Aluminium case for rugged transport protection, foam sealed against dust, foam cut-outs cushion instruments
- ✓ Push ON button, switches itself OFF after 2minutes to conserve battery OR
- ✓ Push to test button, measures probe resistance and electronics check
- ✓ 9 volt standard Alkaline battery
- ✓ Value engineered for robustness, simplicity and maximum reliability
- ✓ Factory test certificate provided.
- ✓ Calibrated against SURE Engineering 70kV dc reference which is SABS calibrated
- ✓ Separate SABS test certification can be provided



## DC/PT 75 Applications

- ✓ Electro-static precipitator testing
- ✓ Electro-static separator testing
- ✓ Laboratory DC Voltage testing
- ✓ HV railway and traction testing
- ✓ HV DC drives
- ✓ X-ray machine testing
- ✓ Medical equipment power supply testing
- ✓ Nuclear equipment power supply testing

## Technical Description:

- ✓ **Physical:** Circuitry is potted in high impact polyurethane resin to provide modules that are virtually indestructible in normal use and will have an extra long life expectancy.
- ✓ **Serial Numbers:** Each DC/PT has its own unique Serial Number, to ensure the highest possible manufacturing quality, and product operating trace ability.
- ✓ **Materials:** PVC outer on the probes, filled with polyurethane potting compound (FR453)
- ✓ **Probe Dimensions:** Probe length (active) = 800mm, probe diameter = 25mm.
- ✓ **Sensor Dimensions:** Sensor length = 70mm, sensor diameter = 90mm.
- ✓ **Handle Dimensions:** Handle length = 300mm handle diameter = 35mm. Stick insulation
- ✓ **Mass:** 12kg (including case)
- ✓ **Battery:** A 9 volt Alkaline PP3 battery is contained in plastic sensor box, and is easily changeable by removing four screws. Auto power down circuit operates after about three minutes to conserve battery power.
- ✓ **Battery terminals:** The battery terminals are protected internally from being crushed in the likely event that the tester is dropped. Care should of course always be exercised when handling an instrument
- ✓ **Testing the DC/PT tester:** A SURETECH High Voltage proving unit is available (user to order) to prove that the DC/PT is operating, and should always be used to cross-check that the DC/PT is healthy
- ✓ **Sensor Circuitry:** Circuitry includes: sensing, threshold detection, battery healthy indicator (green LED), auto power-down, and drivers for the high-brightness orange LED and buzzers
- ✓ **Outputs:** the following output configurations are available, and need to be user specified:
  - ✓ **Threshold LED:** LED is ON when user defined threshold is exceeded
  - ✓ **Flasher LED:** LED flashes out a THREE digit accuracy count, which the user simply counts to determine voltage
  - ✓ **LCD display:** 2line by 8 character alphanumeric display
  - ✓ **RS232:** can be user specified for logging type applications
- ✓ **Controls:** ON / OFF battery switch, earth terminal stud connection
- ✓ **Aluminium case:** Dimensions: 1200x300 x150mm, foam cut outs are provided to locate equipment, and provide protection for transport. Foam strip is provided at joint between base and lid for dust seal

## Every electrical professional needs DC/PT

As an electrical professional, ie technician, electrician or engineer, you are probably (wisely) somewhat apprehensive each time you approach HV equipment or apparatus, being unsure whether the apparatus is live or dead. SURETECH™ DC/PT is a compact, affordable, high quality contact tester. The SURETECH™ DC/PT comes from the same family as HV/PT2 tester for AC, which **has** saved many lives to date!

Within a matter of seconds you can measure **for yourself** whether a voltage exceeding 750V is present. The tester is so simple to use, that even less skilled workers can operate it with a **minimum of instruction**. You will be **less stressed** knowing that you are carrying your own Personal contact tester at all times. You will **sleep better** at night, without worrying about that dreaded electrical flash-over. Supervisors will **not have the constant anxiety** of being responsible for the safety of others, and **will no longer have to endure the guilt** that follows an electrical accident. SURETECH™ DC/PT will allow each worker to **take responsibility for his own safety** without having to rely on supervisors or colleagues to confirm that certain electrical apparatus is isolated. When each person carries his own tester, **higher levels of confidence** can be attained as each individual can ascertain the state of the apparatus under test. **Better team work** is attained with SURETECH™ DC/PT testers using the correct procedures, which will lead to much **safer operating conditions**. SURETECH™ DC/PT is value engineered so that your organisation can afford to provide each electrical worker with his own tester.

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**CAUTION: Before operating the SURETECH™ DC Personal Tester, read the manual carefully**



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