

Is the SAFETY of your ELECTRICAL WORKERS ensured?

SURETECH™ HV/PA... *the High Voltage Personal Alert*

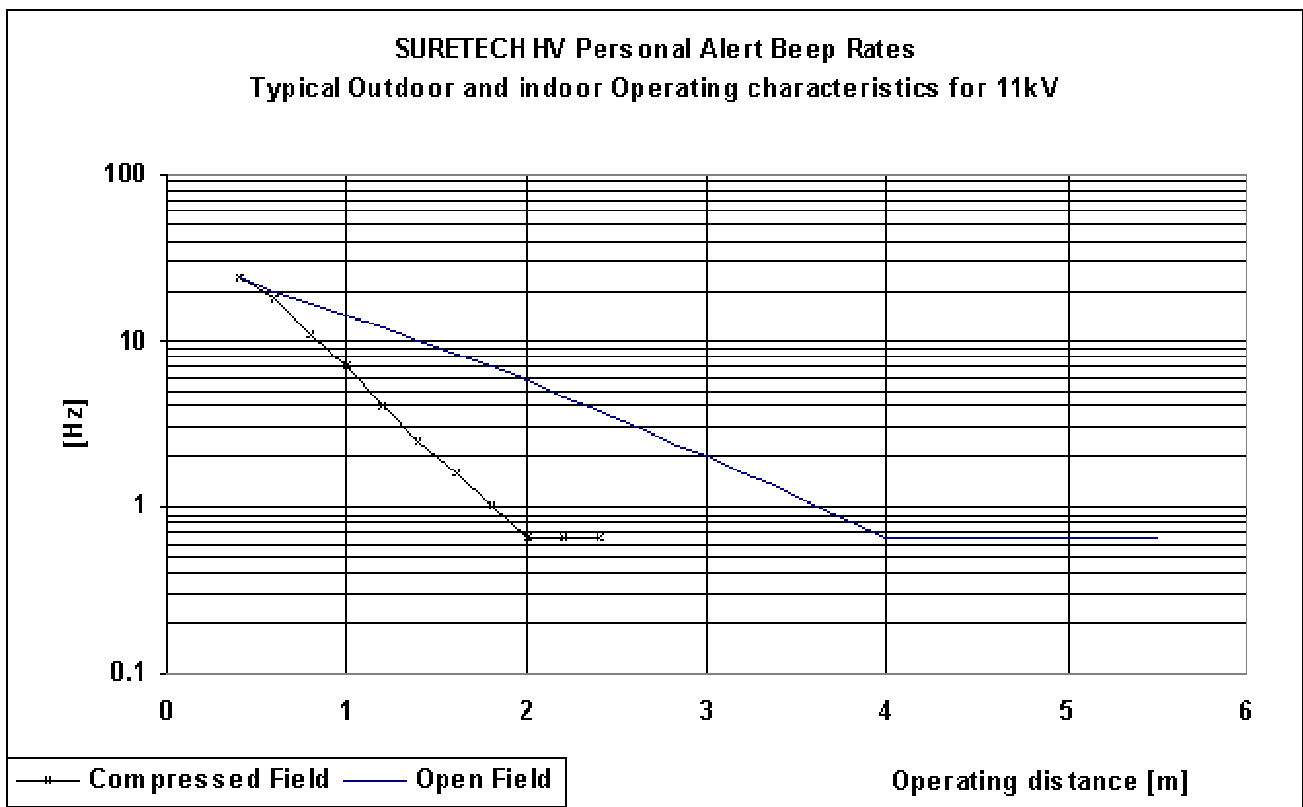
HV/PA Applications

- ✓ Out-door power line operations
 - ✓ Indoor and outdoor sub-station work, HV & MV
 - ✓ LV workers such as street lighting, Telkom, TV workers etc. working near MV
 - ✓ Security personnel doing power line patrols
 - ✓ Cable jointing checks
- ✓ fault finding and operating on circuits from 1kVac up to hundreds of kV can be carried out
 - ✓ Unit can be deployed as a "Guardian Angel" next to a conductor, and will beep / flash to warn a user who is nearby, that the conductor has become live
 - ✓ HV transformers, cables, and insulated switchgear circuits can be tested through insulation.



HV/PA Features

- ✓ Worn on wrist, shoulder, or on hard hat
- ✓ NO user controls (such as ON / OFF button); the tester is ready at all times to switch itself ON when in the presence of a high AC electric fields
- ✓ When the tester is removed from the electric field, it automatically switches itself OFF after 3 seconds to conserve battery power
- ✓ Detects voltages from mains up to hundreds of kV AC, even through insulation, at a safe distance
- ✓ Static discharge filter (does not switch on in the presence of static alone)
- ✓ Corona discharge filter (always operates at the same distance, even in moist corona conditions)
- ✓ Buzzer beeps and LED flashes at a rate determined by strength of electric field
- ✓ When beep / flash rate is less than twice a second, then the user is safe
- ✓ The closer the user approaches the HV source, the faster the tester beeps
- ✓ Two buzzers are provided to increase sound level (two pitch sound is piercing like a cricket)
- ✓ 9 volt standard Alkaline battery should last a number of years
- ✓ When not in use, the HV/PA can be carried in the pouch (lined with anti-static film) on your belt
- ✓ Value engineered for robustness, simplicity and maximum reliability
- ✓ Affordable for every electrical worker
- ✓ High brightness LED display, and loud buzzers
- ✓ Will reduce stress by working **SAFER**
- ✓ With correct procedure, can actually measure voltage at a safe distance
- ✓ Responds to 50Hz - 60Hz predominantly



Every electrical professional needs HV/PA

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™ HV/PA is a compact, affordable, high quality proximity HV tester. Your own personal HV tester is now available for you to wear at all times. The SURETECH™ HV/PA comes from the HV/PT2 tester, which **has saved many** lives to date!

SURETECH™ HV/PA can actually measure voltage from a safe distance, without touching the HV source. The HV/PA is normally worn on your wrist, worn on the shoulder, or can be mounted on a hard-hat. You will no longer need to run back to your vehicle to fetch the proximity tester because it is too bulky to carry with you. Within a matter of seconds you can measure **for yourself** what the voltage is by checking operating distance against the graph. The tester is so simple to use that even unskilled workers can operate it with a **minimum of instruction**. You will be **less stressed** knowing that you are carrying your own Personal Alert 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™ HV/PA 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™ HV/PA testers using the correct procedures, which will lead to much **safer operating conditions**. SURETECH™ HV/PA is value engineered so that your organisation can afford to provide each electrical worker with his own tester.

Technical Description:

- ✓ **Physical:** The circuitry is potted in a high impact polyurethane resin to provide a module which is virtually indestructible in normal use and will have an extra long life expectancy. SURETECH™ HV/PA sensor module is available in black plastic with white label.
- ✓ **Serial Number:** Each HV/PA has its own unique Serial Number, to ensure trace-ability and the highest possible manufacturing quality.
- ✓ **Dimensions:** 72mm x 68mm x 20mm. Mass, including adapter plates, with battery: 330g.
- ✓ **Battery:** A 9 volt Alkaline PP3 battery is contained in the plastic sensor box, and is easily changeable by removing four screws. The battery provides the source of power to operate the electronic circuits. An auto power down circuit operates after about three seconds 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 HV/PA tester:** A SURETECH Reference Generator is available to prove that the HV/PA is operating, and should always be used to cross-check that the HV/PA and it's battery are healthy
- ✓ **Sensor Circuitry:** Circuitry includes: sensing, threshold detection, battery healthy indicator (green LED), corona & static discharge filter, auto power-down, and drivers for the high-brightness orange LED and buzzers
- ✓ **Controls:** No controls are necessary, as the tester switches itself ON and OFF itself
- ✓ **Adapter stands:** Adapters are available for fitting to various hard-hats and for deployment as "Guardian Angel"
- ✓ **Protection Pouches:** A woven nylon pouch with a velcro seal is supplied; and can be worn on a belt, for transport and protection of the sensor. The velcro sealed pouch is lined with anti-static film, which is needed to stop the tester from switching itself ON from static build up, as it is carried.

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CAUTION: Before operating the SURETECH™ HV/Personal Alert, read the manual carefully



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