Is the SAFETY of your ELECTRICAL WORKERS ensured?

# SURETECH<sup>TM</sup> HV/PT2-L2

the WORLD-CLASS, High Voltage Personal Tester for Low Voltage workers

#### **Approvals:**

- Telkom (South Africa)
- IEC61243 for voltage detectors
- EMC EN50081-1:1991(emission)

#### **HV/PT2-L2 Features**

- The ultimate in simplicity only ONE button to switch unit ON... auto OFF after one minute
- worn on your belt in its pouch, or in your shirt pocket
- detects voltages from mains up to hundreds of kV AC, even through insulation, at a safe distance
- value engineered for robustness, simplicity and maximum reliability
- adapts easily to standard telescopic link sticks
- handles for safe use at high voltages also available
- SURETECH<sup>™</sup> HV/PT testers have been in use by major electricity suppliers since 1976

- EMC EN50082-1:1991(susceptibility)
- SABS Intrinsically Safe approved
- affordable for every electrical worker
- Detachable contact probe is available for contact work
- high brightness LED display, and loud buzzer
- will reduce stress by working SAFER
- can actually measure voltage at a safe distance, by new technology developed by us
- responds to 50Hz 60Hz
- corona discharge filter
- static discharge filter
- automatic power down after a minute of nonoperation, to conserve battery life

#### **Applications**

- LV junction box scanning, quickly checks whether a high voltage line has fallen on, or fouled withTelkom lines, or LV lines
- HV transformer primary and secondary circuits can be tested without removing insulation.
- Power line operations, cable jointing, and sub-station work, HV, MV & LV.
- Fault finding and operating on circuits less than 100 VAC up to hundreds of kV can be carried out.
- HV/PT2-L2 is the most convenient tracer for panel wiring, and 220V fault finding, and isTHE ideal tester for LV bundled cables
- Many more applications

#### Every electrical professional needs HV/PT2-L2



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 SURETECH<sup>™</sup> HV/PT2-L2 is a dead. compact, affordable, high quality proximity HV tester that is manufactured in South Africa. Your own personal HV tester is now available for you to wear at all times. When ON enables the user to approach the HV source on the highest sensitivity at a safe distance. A set of insulated handles is also available.  $SURETECH^{TM}$ HV/PT2 will increase your confidence. SURETECH<sup>™</sup> HV/PTs have saved many lives to date!

#### **Operating Distances:**

Phase Voltage ( to earth ) [ Volts ]	Line Voltage ( line to line ) [ Volts ]	Operating Distance Hand held [ metres ]	Operating Distance with SURETECH HV/PT11 Handle [ metres ]
110	190	0.08	0.03
220	380	0.2	0.05
303	525	0.3	0.07
635	1 100	0.5	0.15
1 905	3 300	1.0	0.4
3 811	6 600	1.5	0.7
6 351	11 000	1.8	0.9
12 702	22 000	2.2	1.1
19 053	33 000	2.5	1.5

### What SURETECH<sup>™</sup> HV/PT2-L2 will do for you

SURETECH<sup>TM</sup> HV/PT2-L2 ...*the High Voltage Personal Tester for Low Voltage* can actually measure voltage from a safe distance, without touching the HV source. Voltage estimates can be done holding the tester in your hand. More accurate measurements can be achieved with the tester on the end of a handle or link stick. The HV/PT2-L2 is normally worn on your belt, or can be carried in a shirt pocket. 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 table above. The tester is so simple to use unskilled workers can operate it with a**minimum of instruction**. You will be **less stressed** knowing that you are carrying your own personal 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<sup>TM</sup> HV/PT2-L2 will allow each worker to **take responsibility for his own safety** without having to rely on supervisors or colleagues to confirm that certain electrical aparatus 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<sup>TM</sup> HV/PT2-L2 is value engineered so that your organisation can afford to provide each electrical worker with his own tester.

#### **Technical Description:**

- **Physical:** The case is very tough poly-carbonate. The circuitry is potted in a high impact resin to provide amodule which is virtually indestructible in normal use and will have an extra long life expectancy. SURETECH<sup>M</sup> HV/PT2-L2 sensor module has marking of black plastic with white lettering.
- Dimensions: 72mm x 68mm x 27mm. Shipping mass is 333g, which includes sensor, battery, LSA, pouch, manual



• **Battery:** A 9 volt Alkaline PP3 battery is contained in the plastic sensor box. The battery provides the source of power to operate the electronic circuits. An auto power down circuit operates after about three minutes to conserve battery power.

• 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 buzzer.

Controls: Press-on switch turns tester ON, protected by switch shroud

• Link Stick Adapter: A probe spacer can be fitted to the LSA for use in accordance with IEC 61243-1 contact type testers. The LSA adapts the tester to the Link Stick. Both LSA and probe fits into the pouch.

• Handles: A black plastic adapter is available for fitting to standard telescopic link sticks. For indoor remote sensing applications, and also confined outdoor applications, a set of SURETECH<sup>TM</sup> handles is available. Handles are made up of UV stabilised grey polypropylene insulating sticks, and a black nylon grip that screws into the insulating stick.

• **Protection Pouch:** A woven nylon pouch with a velcro seal is provided standard, and can be worn on a belt, Velcro sealed bags are also available for the handles.

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CAUTION: Before operating the SURETECH<sup>™</sup> HV/PT2-L2 tester, read the manual carefully



## SURE Engineering CC

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