

ANNEXURE A

Technical Specification for Alcohol Breathalyzer

1. SCOPE OF WORK

- To measure the concentration of alcohol from the sample of the expired breath from a human subject.
- A long-term stability sensor for accurate results.
- Be able to do both passive and direct sampling.

ALCOHOL BREATHALYZER DEVICE

- The device must offer superb accuracy and be (US NHTSA & DOT Approved).
- Must be user friendly functionality including colour TFT touchscreen. and 16, 000 test record storage space with 20 fully customisable data fields (name, shift, department etc).
- All information must be easily downloadable to a PC for reporting and backup purposes via the optional PC software.
- Must be able to display the breath alcohol reading in any of the commonly used units of measurement e.g. ug/100ml/ promile, mg/L, % BAC, mg/100ml, mg/ml, etc.
- The breathalyser must be equipped with a mouthpiece ejection feature (no contact with saliva),
- Have a compact wireless Bluetooth thermal printer module WPT-2B to allow hard copy printing of test results when breath sample evidence is required.
- Test results must be printed immediately on the printer or from the memory later.
- A hard plastic case must be included for the storing of the device and accessories for easy transport.
- To hold 16 000 test record storage space with 20 fully customisable data fields (name, shift, department etc).
- Be able to Alert on alcohol limit adjustment.

TECHNICAL SPECIFICATION

- **Sensor:** Fuel Cell
- **GPS:** Optional
- **Working Temperature:** -10°C to 50°C
- **Storage Temperature:** -20°C to 70°C
- **Storage humidity:** Not greater than 95%
- **Size:** 150mmx70mmx3.5mm
- **Weight:** 255g with batteries

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- **Battery Life:** Not less than 500 tests
- **Battery:** 4 AAA Alkaline Batteries
- **Display LCD size:** 2.4" TFT Colour Touch Screen
- **Memory:** 2000 tests records
- **Clock:** Real time clock
- **Units of Measure:** BrAC: mg/L, or any other units | BAC: grm%, mg/mL, mg/100mL, or any other units
- **Detection Range:** 0.000 mg/l or any other units
- **Accuracy:** 0 to 0.100% BAC +/- 0.005% BAC
- **Measuring Modes:** Active and Passive
- **Printer:** Thermal Printer (Optional) Easy load paper
- **Connection Type:** USB
- **Sampling System:** Automatically or manually take a deep lung sample
- **Self-diagnostic tests:** Perform self-diagnostic tests during start up
- **Calibration information:** Date of last calibration displayed on main screen
- **Software with USB cable:** Download records onto a Windows PC (Optional)

PHYSICAL SPECIFICATION

