

An Affordable Professional Grade Breathalyser for Personal Use



Alcolizer Easy Check is the first of a new generation of professional grade personal breathalysers using a fuel cell sensor. The designers have packaged the same technology used in much larger Police breathalysers into a pocket-sized unit. It is convenient to use, and enables people to confidently make informed decisions about alcohol levels.

The Alcolizer Easy Check is certified to Australian Standard AS3547 for personal breath testing devices as a quantitative device and displays a reading of breath alcohol to 3 decimal places. This is achieved by utilising a fuel cell sensor, which makes it unique among personal breathalysers. Other certified devices have only over / under indicators which do not allow the user to make fully informed assessments of their alcohol levels.

One of the key elements of the Easy Check design philosophy has been to reduce the time required to assemble the unit, ensuring that the manufacturing costs in Australia are kept reasonably low. This was achieved in the design of the unit itself by efficiently minimising the number of internal components and also by streamlining the assembly process. These savings have allowed the use of high grade fuel cell sensor technology usually only found in professional, industrial and police breathalysers.

Fuel cell sensors are alcohol-specific, are unaffected by other substances, and are less prone to false readings than the electronic sensors used in all other personal devices. Fuel cells are also more stable and give consistent, accurate results. Easy Check also employs a unique airflow sensor to ensure that only a deep lung air sample is used, necessary for accurate results.

The innovative electronics design uses a powerful 16-bit RISC processor, which allows faster and more complex operations. This has benefits in enabling better signal processing to be used, thereby improving accuracy. Efficient circuit design has been adopted throughout to provide low current consumption for extended battery life, which is more than 6 months with normal use.

The Design combines the aesthetics of a contemporary personal electronic device with the credibility of a scientific instrument. From a user perspective, the benefits of Easy Check are its compact size, intuitive operation, light weight, robustness, accuracy and reliability.

The breathalyser's operational features include logical single button operation for ease of use, which along with a large character backlit display facilitates alcohol level checking in dark environments. A sequence of audible tones give the user feedback during the testing process, as the display is not visible while blowing into the unit. The screen retains the last reading and also displays the length of time and number of tests remaining before recalibration is due. Easy Check is supplied with 4 replaceable mouthpieces for personal hygiene, a protective soft cover, and a compact carry case which is also used to return the device for recalibration.

In developing Easy Check, the designers have integrated the design of the centralised recalibration system with the design of the product itself, to ensure a fast turnaround in maintaining the unit's accuracy. The breathalyser plugs into a dedicated receptacle on the calibration station to provide an automated recalibration, including firmware upgrades when appropriate.

This new product is an important contribution to road safety, it is an affordable device which for the first time brings professional performance within reach of consumers. Easy Check is a personal breathalyser that can be trusted.