



The PiKo-1 And How It Works

The PiKo-1 utilizes a patented flow sensing “variable orifice” mechanism for measuring the patients maximum forced exhaled air FLOW (PEF). Using this technology coupled with a custom designed microcontroller, the PiKo-1 is able to also calculate and report the patients exhaled VOLUME over the first second of the maneuver (FEV-1). It is important to note that FEV-1 is generally regarded as a far superior test parameter for monitoring the symptoms of Asthma. It is calculated by integrating FLOW and TIME. While there are many “mechanical” meters that can measure PEF, without an electronic means to dynamically sense flow and a microcontroller to process the data, it is not possible to report FEV-1. Thus, the PiKo1 is able to provide a measurement that until now was only available on instruments costing many times more.

Additionally, the PiKo1 has built in memory that “remembers” the date/time and test measurements of the last 96 tests that a patient performs. It also stores and reports a comparison of each measurement to the patient’s reference or “zone” values. The patient may review each of these measurements at any time, eliminating the need for clumsy hand written and error prone “diaries”. By using an integrated infrared (IR) “window”, the PiKo-1 can download this data to the PiKoTrend software, a Windows based program that allows the patient or physician to monitor a patients lung function.

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