

## **ABSTRACT**

*Peak Flow Meter (PFM) is a tool to measure the Peak Flow of Air Expiration in the road (PFR) or commonly referred to as Peak Expiration Flow (PEF) and to connect asthma. The value of PEF can help a number of factors in age, respiratory muscle strength, height and gender. Airway measurements are used to measure patients suffering from asthma.*

*This peak flow meter tool works based on the air pressure produced from the patient's puff using the MPX5100GP pressure sensor in the range of 0 to 100 kpa and the voltage output is 0.2 to 4.7 VDC to increase wind pressure in the patient. From the pressure converted to voltage and enter the 0 from the Arduino nano minimum system circuit to be processed into analog data and then put into units of liters / second, the value of the flow meter is sent and replaced to a PC with the Delphi7 application.*

*Based on the measurement and comparison of tool data with a comparison tool, the highest error value was 2.8%. With a maximum permissible tolerance of 5%.*

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**Keywords : PEF, Asthma, Pressure, MPX5100GP**

