ABSTRACT

Erythrocyte sedimentation rate checker tool based microcontrollers include normal-abnormal indicator is elektromedical tool used to measure the speed of blood deposition in the scale milemeter per hour. Observations from the measurement results erythrocyte sedimentation rate can provide more specific information about the inflammation in the blood.

Generally, the erythrocyte sedimentation rate checker tool can only display the value of the measurement results and only the last reading the inference manually by the operator. Therefore, the authors intend to make the Erythrocyte Sedimentation Rate Checker Tools Based Microcontroller include Normal-Abnormal Indicators that make it easier for the operator in the measurement and inference measurement results.

This module is able to examine a sample of the erythrocyte sedimentation rate of adult patients with error value of 0% by utilizing the function of detection Opto Interrupter sensor. The error value was obtained after the measurement and benchmarking experiment was done 2 times to 4 respondents and 1 times in 2 respondents for linearity measurements per 10 minutes for 1 hour using a comparator in the form of a pipette Westergren.

Keywords: Erythrocyte Sedimentation Rate Checker Tools Based Microcontroller include Normal-Abnormal Indicators, Normal-Abnormal Indicators, Opto Interrupter