

DESIGN AND CONSTRUCTION OF A CHARGING STATION FOR SMARTPHONES AS A PUBLIC FACILITIES WITH E-KTP ACCESS AS RFID TAG

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ABSTRACT

The use of technology and electronic devices is increasing as time goes by. Tourists often face difficulties in charging electronic devices such as smartphones, laptops and power banks. Several previous tool designs, such as kWh meters and charging stations, still have shortcomings and limitations in their use. In this research, the author designs and makes a charging device using an RFID sensor that utilizes e-KTP as user identification. This tool allows users to charge electronic devices for free and can be deployed at various locations, including tourist attractions, airports, train stations and bus stops. This research was carried out by carrying out 15 experiments to test a particular system. The results of the test show that this charging station system has an accuracy of 86.65%. With this high level of accuracy, it can be concluded that the system as a whole can function quite well.

Keywords: *Charging Station, RFID Sensor, Public Facilities*