

***Design of Windbelt Mini Generator
with Parallel and Series System Networking***
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ABSTRACT

The development of renewable energy innovations that are environmentally friendly continues to increase. One of them is in wind energy, namely the windbelt mini generator innovation. This research was conducted to develop a mini windbelt generator with the use of tube neodymium magnets. Windbelt mini generator design is made using materials that are easily available at affordable prices. The main materials used are plywood, metal plate, ribbon, coils (copper wire), neodymium magnets, diodes, and resistors. This research combines the dimensions of the ribbon and the dimensions of the magnet to produce optimum power. Based on the tests carried out, the highest output value is 85.57 mW which comes from 2 pairs of coils. Pair of coil 1 is 45.60 mW (6.59 mV, 6.92 mA) and coil of coil 2 is 40.67 mW (6.68 mV, 6.08 mA)

Keywords: *renewable energy, innovation, Neodymium magnet, windbelt mini generator.*