

A Portable Mobile Phone Charger using Pico Wind Turbine



Battery

- ▶ Lead Acid Rechargeable battery- 6V , 1.2Ah

Various Components used

- ▶ Voltage Regulator 78xx
- ▶ Transistors: 2N3906, BC557, BC107, 2N2222

RESULTS:

- ▶ The Pico turbine output was good enough to charge the battery bank.
- ▶ The battery did not discharge when the rotor is stationary.
- ▶ A Nokia cell phone (1100) was charged using the lead acid battery bank.

Pico Turbine:

- ▶ Vertical Axis Savonius Wind Turbine
- ▶ 6 stator coils (enamel coated)
- ▶ 6 Ceramic Grade 5 permanent Magnets
- ▶ Output: AC



Voltage Tripler:

- ▶ Voltage doubler stacked atop single stage rectifier
- ▶ Input: AC
- ▶ Output: DC

Mobile Phone charging circuit:

- ▶ To boost the current from battery to Mobile phone

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