

FEASIBILITY STUDY FOR AUTOMATIC POWER PHASE/SOURCE SELECTOR SYSTEM

This feasibility study assesses the viability of developing an Automatic Power Phase/source Selector System. The device ensures uninterrupted power supply by automatically switching between phases or sources in case of phase/source failure or imbalance.

Technical Feasibility;

Design and Development: The system can be designed using microcontrollers, sensors, and power electronics and other electronics components

Component Availability: Key components are readily available in the Nigerian electronic market.

Technical Expertise: Our team has the necessary technical expertise to develop the system and continue the production

Economic Feasibility;

Cost-Benefit Analysis: The system can reduce equipment damage and downtime, resulting in cost savings.

Market Demand: Growing demand for reliable power supply solutions.

Competitive Pricing: The system can be competitively priced with other power protection solutions.

Operational Feasibility;

Ease of Use: The system is designed to be user-friendly and easy to operate.

Maintenance: Regular maintenance can be performed by trained personnel.

Scalability: The system can be scaled up or down depending on the application.

Market Feasibility;

Target Market: Industrial, commercial, and residential sectors.

Market Size: Estimated 10,000 potential customers in the first year.

Growth Rate: 25% annual growth rate.

Financial Feasibility;

Development Costs: N39,000,000 (estimated).

Production Costs: N150,000 per unit (estimated).

Revenue Projections: N10,000,000 (Year 1), N20,000,000 (Year 2), N50,000,000 (Year 3).

Conclusion;

The Automatic Power Phase/source Selector System is technically, economically, operationally, and financially feasible. With a growing market demand and potential for cost savings, this project is worth pursuing.

Recommendations;

Proceed with development and testing. Conduct market research to refine the product and marketing strategy.

Establish partnerships with industry partners, contractors and suppliers.