

# Thermo-Electric Delivery Cabinet

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**Abstract:** This paper presents the development of a two-in-one delivery cabinet that utilizes thermoelectric modules to achieve both heating and cooling functions for hot and cold food items. The cabinet consists of two separate compartments, each with its own thermoelectric module, designed to maintain the temperature of food items between 60°C to 80°C for the hot section and between 0°C to 5°C for the cold section. The cabinet is equipped with a digital controller that allows the user to set the desired temperature for each section. The use of thermoelectric technology in food delivery cabinets has several advantages over traditional heating and cooling systems. Firstly, it is energy efficient and more environmentally friendly as it does not require a compressor or refrigerant, which can be expensive to operate and maintain. Secondly, it is compact and lightweight, making it easier to transport and install. The two-in-one delivery cabinet offers a more efficient and cost-effective solution for food delivery companies to maintain the temperature and freshness of food items during transportation. The use of this technology has the potential to revolutionize the food delivery industry and contribute towards a more sustainable future.

**Keywords:** Thermoelectric, Temperature, Cabinet, Sustainable.

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