## IOT Based Evaporation Cooler Using MIT Application

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Abstract:

This paper aims to develop an Internet of Things (IOT) based evaporation coolers, which is a growing trend of the 21st century. This work analyses the installation of the IOT into the coolers which increases the cost-effectiveness and performance of the system. Historically the cooler system has grown with its technology and composition yet its substantial chance of simplified necessity has grown bigger. Evaporative cooling decreases costs, as a compressor does not have to operate completely loaded and in recent trends, IOT based evaporation coolers will be considered as more effective and efficient. In the modern world, IOT based coolers are the increasing trend, analyze environmental indoor conditions such as temperature, CO<sub>2</sub> levels, occupant numbers, and so on) and monitor energy usage through the sensor grid. Simply put any movement sensor and internet-linked physical device, in which data is managed and transmitted via IOT. This is more like the physical hardware world is manufactured and controlled by IOT sensors. A physical thing that can be controlled and communicated with an autonomous human object will assist to ease communication via servers and sensors with the aid of an internet connection when linked to an IOT device. The cooler has enhanced its power with IOT in comparison to the new technical upgrade in conventional coolers. It also enabled a number of new capabilities to be included in the cooler to solve further challenges with realtime cooling like controlling the cooler via app, google assistant, controlling the humidity, setting timers. The app is built in MIT app inverter and all the added features in the cooler can be controlled via this app.

Keywords: Evaporation Cooler, Internet of Things, MIT App Invertor

I. INTRODUCTION

Ancient Egyptians were the pioneer for using coolers to beat the scorching heat, they believed and executed that, dry air becomes wet and cool when blooming through damp carpets or through water-filled porous clay pots. This idea has also been employed by ancient Greeks, Romans, and