Development of Automatic IoT-Based Packaged Drinking Water Filling and Sealing Equipment at Pondok Pesantren Tahfidz Al Barokah Merapi

by Sarwo Pranoto, Samsul Hadi, Rustam Asnawi, Nurman Setiawan, Yudi Utomo Putra, Abu Bakar, Yamsya Fathoni Nur Muhammad, Fadhila Puspitasari, Nopa Widiyanto, Muhammad Kusnadi, Winarno Surahmad

ABSTRACT

Abstract

The Community Service Activity (CSA) on "Development of Automatic Filling and Sealing Equipment for Packaged Drinking Water Based on IoT at Pondok Pesantren Tahfidz Al Barokah Merapi" was carried out at the Department of Electrical Engineering Education, Faculty of Engineering, Yogyakarta State University (UNY) campus and at Pondok Pesantren Al Barokah Merapi. This activity was conducted by a CSA team consisting of lecturers from the Department of Electrical Engineering Education, FT UNY, with the aim of empowering the students of Pondok Pesantren Tahfidz Al Barokah Merapi through the production of packaged drinking water.

The method employed in this activity involved the creation and development of a product with guidance. The creation and development were focused on the filling and sealing machine for packaged drinking water, which was equipped with Internet of Things (IoT) technology.

The results of the activity demonstrated the availability of an automatic filling and sealing equipment product for packaged drinking water based on IoT at Pondok Pesantren Al Barokah Merapi. Several administrators and students were able to operate the machine to produce packaged drinking water.

Kata Kunci: Filling and sealing machine, IoT, AMDK