
Design of a Flow Velocity Meter for Tides in the River Using Arduino

Sanya Samaimak¹ and Shanin Harnnarong¹

ABSTRACT

The Royal Irrigation Department is responsible for managing water availability in Thailand. Many instruments are used to read the data to obtain the needed hydrological data. The instruments that it has applied to measure the velocity of the tide are the flow velocity meters A-OTT C31 that compatible with the audio and numerical displayer Z 41-00. They have been used for 30 years, (1988 - 2018).

Design of a flow velocity meter for tides in the river using Arduino was presented in this paper. It was designed to use as a substitute for the audio and numerical displayer Z 41-00 that were broken. The result of the design and the experimentation show the ability of working together with the flow velocity meters A-OTT C31 and the accuracy of the data acquired from this designed instrument are satisfactory.

Keyword: The Royal Irrigation Department, Flow Velocity Meter, Arduino

¹ Department of Instrumentation Engineering, Faculty of Engineering, Rajamangala University of Technology Rattanakosin, 96 Moo 3 Salaya, Phutthamonthon, NakhonPathom 73170, Thailand
Corresponding author, e-mail: sanya.sam@rmutr.ac.th