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KEY WORD: PID CONTROLLER / DIGITAL
SURIYONG LERTKULVANICH : A DEVELOPMENT OF A COMPACT DIGITAL PID CONTROLLER. THESIS ADVISOR : DR.SOMBOON CHONGCHAIKIT,170 pp. ISBN 974-583-058-5

This thesis deals with the design, development and construction of Compact Digital PID Controller. The input of the controller can be TC sensor or standard current 4-20 mA DC. The output is standard current 4-20 mA DC. The controller provides 2 types of PID algorithm which can be selected by user. User friendliness and compactness are the main design concept. Operator interface is done via five push buttons and LCD display. The result of the development can be used to construct a prototype for industrial product.

The built controller was tested in the laboratory by using model plant with simple feedback control loop. The test result met the design criteria with sampling period of 100 ms.