## **DAFTAR SINGKATAN**

IoT : Internet of Things

LPWAN : Low Power Wide Area Network

LoRa : Long Range

LoRaWAN : Long Range Wide Area Network

LCD : Liquid crystal display

RSSI : Received Signal Strength Indication

SNR : Signal to Ratio

FSPL : Free Space Path Loss
SF : Spreading Factor
QoS : Quality Of Service

MHz : Megahertz

RF : Radio Frequency
Tx : Transmitter
Rx : Receiver

TH : Through Hole

SMD : Surface Mount Device
 PCB : Printed Circuit Board
 LED : Light Emitting Diode
 Wi-Fi : Wireless Fidelity

NPK : Nitrogen, Phosphorus, Kalium

SDA : Serial Data SCL : Serial Clock

I2C : Inter Integrated Circuit

IDE : Integrated Development Environment

HTTP : Hypertext Transfer Protocol

MQTT : Message Queuing Telemetry Transport CoAP : Constrained Application Protocol

dB : desibel

dBM : desibel-milliwatt
kbps : Kilobyte per second
M2M : Machine to Machine
WSN : Wireless Sensor Network
PAN : Personal Area Network
CAD : Computer Aided Design
BMS : Battery Management System