DAFTAR PUSTAKA

[1] Syafnidawaty, "Internet of thing (IoT)," *IoT Agenda*, 2020. https://internetofthingsagenda.techtarget.com/definition/Internet-of-Things-IoT

[2] H. Andre, B. A. Sugara, R. Fernandez, and R. W. Pratama, "Analisis Komunikasi Data Jaringan Nirkabel Berdaya Rendah Menggunakan Teknologi Long Range (LoRa) di Daerah Hijau Universitas Andalas," vol. 9, no. 1, pp. 1–7, 2022.

[3] R. INDONESIA and KOMINFO, "KEMENTRIAN KOMUNIKASI DAN INFORMATIKA REPUBLIK INDONESIA: PERATURAN DIREKTUR JENDERAL DAN PERANGKAT POS DAN INFORMATIKA NO. 3 TAHUN 2019 TENTANG PERSYARATAN TEKNIS ALAT DAN/ ATAU PERAGKAT TELEKOMUNIKASI LOW POWER WIDE AREA," 2019.

[4] S. M. Asenov and D. M. Tokmakov, "Power Optimization of LoRaWAN Wireless End Sensor Node," *2020 29th Int. Sci. Conf. Electron. 2020 - Proc.*, pp. 10–13, 2020, doi: 10.1109/ET50336.2020.9238204.

[5] T. Bouguera, J. F. Diouris, J. J. Chaillout, R. Jaouadi, and G. Andrieux, "Energy consumption model for sensor nodes based on LoRa and LoRaWAN," *Sensors (Switzerland)*, vol. 18, no. 7, 2018, doi: 10.3390/s18072104.

[6] Z. Y. Jamarani, "Secure and Low-power Mobile LoRa Messenger," *Researchgate.Net*, no. September, 2021, doi: 10.13140/RG.2.2.19774.20808.

[7] A. U. Rehman and M. T. Iqbal, "Design of an Ultra-Low Powered Data-Logger for Stand- Alone PV Energy Systems," vol. 4, no. 6, pp. 1–6, 2020.

[8] S. M. Siddhanta Borah, R. Kumar, Writtick Pakhira, "Design and Analysis of Power Efficient IoT Based Capacitive Sensor System to Measure Soil Moisture," 2020.

[9] Y. F. Susanto, "Efisiensi Daya untuk Pantauan Data Heart Rate menggunakan Metode Idle Time-Deep Sleep," pp. 5–6, 2019, [Online]. Available: http://repository.dinamika.ac.id/id/eprint/3865/

[10] H. Septian, "UJI UNJUK KERJA MODUL WIRELESS LORA DRAGINO PADA SISTEM INTERNET OF THINGS (IOT)," vol. skripsi, 2018.

[11] IoT.Business.News, "IoT News - Smart Cities & Smart Homes - How to Evaluate Connectivity Options for Smart Water Meters in the IoT Age." 2019. [Online]. Available: https://iotbusinessnews.com/2019/12/19/28448-how-to-evaluate-connectivity-options-for-smart-water-meters-in-the-iot-age/

[12] J. Peña Queralta, T. N. Gia, Z. Zou, H. Tenhunen, and T. Westerlund, "Comparative study of LPWAN technologies on unlicensed bands for M2M communication in the IoT: Beyond Lora and Lorawan," *Procedia Comput. Sci.*, vol. 155, no. 2018, pp. 343–350, 2019, doi: 10.1016/j.procs.2019.08.049.

[13] N. Selimović, "ABP vs OTAA | The Things Stack for LoRaWAN." 2021. [Online]. Available: https://www.thethingsindustries.com/docs/devices/abp-vs-otaa/

[14] LoRa Alliance Technical Committee Regional Parameters Workgroup, "RP002-1.0.3 LoRaWAN® Regional 41 Parameters," *LoRa Alliance*, pp. 1–94, 2021, [Online]. Available: https://lora-alliance.org/wp-content/uploads/2021/05/RP-2-1.0.3.pdf

[15] PT. Telekomunikasi Indonesia Tbk, "ANTARES | Reliable IoT Platform," *Telkom Indonesia*. 2017. [Online]. Available: https://antares.id/id/mitappinventor2.html

[16] iwan perdana Setiawan, "ANALISIS PARAMETER LORA PADA LINGKUNGAN INDOOR," 2020.

[17] S. F. Mochamad, F. Imansyah, and J. Marpaung, "Analisis Kinerja Modul Transceiver SX1278 pada Sistem Monitoring dengan Jaringan Star," *J. Untan*, vol. 2, no. 1, 2021.

[18] R. Lie, "LoRa/LoRaWAN Tutorial 10 - RSSI & SNR," 2018.

[19] A. Ramadhani, A. Rusdinar, A. Z. Fuadi, and U. Telkom, "DATA KOMUNIKASI SECARA REAL TIME MENGGUNAKAN LONG RANGE (LORA) BERBASIS INTERNET OF THINGS UNTUK PEMBUATAN WEATHER STATION REAL TIME COMMUNICATION DATA USING LONG RANGE (LORA)," vol. 8, no. 5, pp. 4259–4268, 2021.

[20] Espressif Systems, "ESP32 datasheet," 2022, [Online]. Available: https://www.espressif.com/sites/default/files/documentation/esp32_datasheet_en.pdf

[21] L. HOPE MICROELECTRONICS CO., "RFM95W-915S2 Datasheet," *datasheet*, vol. 98, pp. 1–21, 2022.

[22] Mouser Electronics, "DHT11 Temperature & Humidity Sensor datasheet," *Melliand Textilberichte*, vol. 76, no. 12, p. 1112, 2019, doi: 10.1117/3.1002910.ch11.

[23] D. Semiconductor, "DS18B20 Programmable Resolution 1-Wire ® Digital Thermometer datasheet," pp. 1–27, 2019, [Online]. Available: https://pdf1.alldatasheet.com/datasheet-

pdf/download/58557/DALLAS/DS18B20.html

[24] GreatScottLab, “Make Your Own Power Meter_Logger _ 5 Steps (with Pictures) - Instructables,” 2019. https://www.instructables.com/Make-Your-Own-Power-MeterLogger/

[25] Arduino, “ARDUINO NANO, datasheet,” no. pin 30, pp. 1–3, 2018, [Online]. Available: https://www.datasheets.com/en/part-details/arduino-nano-arduino-corporation-66462858

[26] Texas Instruments, “INA219 Zerø-Drift , Bidirectional Current / Power Monitor With I 2 C Interface, datasheet,” 2022, [Online]. Available: https://www.ti.com/lit/ds/symlink/ina219.pdf

[27] M. C. Adapter and M. Sd, “Micro SD Card Module for Arduino, datasheet,” *2019*, pp. 3–4, 2019.

[28] Vishay, “16 x 2 Character LC datasheet,” pp. 1–26, 2022, [Online]. Available: https://www.vishay.com/docs/37484/lcd016n002bcfhet.pdf

[29] David watson, “Introduction to Arduino IDE - The Engineering Projects.” 2018.

[30] Postman, “Postman API Platform ,” *Official Website of Postman*, 2022. https://www.postman.com/

[31] N. Trisna Anggara, “Cara Menghitung Konversi mAh ke Wh (miliAmpere Hour ke Watt Hour),” *Teknikelektronika.com*. 2019. [Online]. Available: https://teknikelektronika.com/cara-menghitung-konversi-mah-ke-wh-mili-ampere-hour-ke-watt-hour/