

## DAFTAR PUSTAKA

- [1] M. S. Machfud, M. Sanjaya, and G. Ari, “Rancang Bangun Automatic Weather Station (AWS) Menggunakan Raspberry Pi,” vol. 18, no. 2, pp. 48–57, 2016.
- [2] E. Murdyantoro, R. Setiawan, I. Rosyadi, A. W. W. Nugraha, H. Susilawati, and Y. Ramadhani, “Prototype weather station uses LoRa wireless connectivity infrastructure,” *J. Phys. Conf. Ser.*, vol. 1367, no. 1, 2019, doi: 10.1088/1742-6596/1367/1/012089.
- [3] “Perbedaan Stasiun Meteorologi Dengan Stasiun Cuaca.” <http://loggerindo.com/perbedaan-stasiun-meteorologi-dengan-stasiun-cuaca-101> (accessed Dec. 17, 2020).
- [4] A. Valente, S. Silva, D. Duarte, F. C. Pinto, and S. Soares, “Low-cost lorawan node for agro-intelligence iot,” *Electron.*, vol. 9, no. 6, pp. 1–17, 2020, doi: 10.3390/electronics9060987.
- [5] E. Murdyantoro, I. Rosyadi, and H. Septian, “Studi Performansi Jarak Jangkauan Lora-Drigino Sebagai Infrastruktur Konektifitas Nirkabel Pada WP-LAN,” *Din. Rekayasa*, vol. 15, no. 1, p. 47, 2019, doi: 10.20884/1.dr.2019.15.1.239.
- [6] R. G. Wisduanto, A. Bhawiyuga, and D. P. Kartikasari, “Implementasi Sistem Akuisisi Data Sensor Pertanian Menggunakan Protokol Komunikasi Lora,” *J. Pengemb. Teknol. Inf. dan Ilmu Komput.*, vol. 3, no. 3, pp. 2201–2207, 2019.
- [7] B. Data, P. Wsn, F. N. Aroeboesman, M. H. H. Ichsan, and R. Primananda, “Analisis Kinerja LoRa SX1278 Menggunakan Topologi Star Berdasarkan,” *Pengemb. Teknol. Inf. dan Ilmu Komput.*, vol. 3, no. 4, pp. 3860–3865, 2019.
- [8] T. Susilawati and I. Awaludin, “Eksplorasi Sensor , Gps , Dan Moda Komunikasi Nirkabel Internet Of Things,” *Ikra-Ith Inform.*, vol. 3, no. 2, pp. 96–103, 2019.
- [9] A. Augustin, J. Yi, T. Clausen, and W. M. Townsley, “A study of Lora: Long range & low power networks for the internet of things,” *Sensors*

- (Switzerland), vol. 16, no. 9, 2016, doi: 10.3390/s16091466.
- [10] “About LoRaWAN® | LoRa Alliance®.” <https://loro-alliance.org/about-lorawan> (accessed Dec. 11, 2020).
- [11] H. Arijuddin, A. Bhawiyuga, and K. Amron, “Pengembangan Sistem Perantara Pengiriman Data Menggunakan Modul Komunikasi LoRa dan Protokol MQTT Pada Wireless Sensor Network,” *Pengemb. Teknol. Inf. dan Ilmu Komput.*, vol. 3, no. 2, pp. 1655–1659, 2019.
- [12] Semtech, “LoRa Modulation Basics AN1200.22,” *App Note*, no. May, pp. 1–26, 2015, [Online]. Available: <http://www.semtech.com/images/datasheet/an1200.22.pdf>.
- [13] I. M. R. Premana, M. Abdulrohman, and A. G. Putrada, “Analisis Perbandingan Topologi Mesh dan Star Dalam Meningkatkan Performansi Smart Fire Alarm.”
- [14] R. Istifarroh, D. M. Imrona, and I. Ummah, “MENGUNAKAN QUEUE TREE DENGAN TOPOLOGI STAR,” pp. 1–7.
- [15] N. F. Puspitasari, “Analisis Rssi ( Receive Signal Strength Indicator ) Terhadap Ketinggian Perangkat Wi-Fi Di Lingkungan Indoor Nila Feby Puspitasari Pendahuluan Latar Belakang Masalah Batasan Masalah Tujuan dan Manfaat Penelitian Dasar Teori Wi-Fi ( Wireless Fidelity ) Ars,” *J. Ilm. Dasi*, vol. 15, no. 04, pp. 32–38, 2018.
- [16] M. Ismail, “Rancang Bangun Pengukuran RSSI (Receive Signal Strength Indicator) Berbasis Aplikasi Android Menggunakan APP Inventor,” pp. 25–30, 2018.
- [17] A. Chinthya, P. Doan, and K. A. E. I, “PLATFORM ANTARES BERBASIS LORA IEEE 802 . 15 . 4g LANDSLIDE CENTER MONITORING SYSTEM WITH ANTARES,” 2016.
- [18] A. D. Haq, I. Santoso, and Z. A. A. Macrina, “Estimasi Signal To Noise Ratio (SNR) Menggunakan Metode Korelasi,” *Transient*, vol. 1, no. 4, pp. 1–8, 2012.
- [19] S. W. Pamungkas and E. Pramono, “Analisis Quality of Service (QoS) Pada Jaringan Hotspot SMA Negeri XYZ,” *e-Jurnal JUSITI (Jurnal Sist.*

- Inf. dan Teknol. Informasi*), vol. 7–2, no. 2, pp. 142–152, 2018, doi: 10.36774/jusiti.v7i2.249.
- [20] P. R. Utami, “Analisis Perbandingan Quality of Service Jaringan Internet Berbasis Wireless Pada Layanan Internet Service Provider (Isp) Indihome Dan First Media,” *J. Ilm. Teknol. dan Rekayasa*, vol. 25, no. 2, pp. 125–137, 2020, doi: 10.35760/tr.2020.v25i2.2723.
- [21] Y. A. Pranata, I. Fibriani, and S. B. Utomo, “Analisis Optimasi Kinerja Quality of Service Pada Layanan Komunikasi Data Menggunakan Ns-2 Di Pt. Pln (Persero) Jember,” *Sinergi*, vol. 20, no. 2, p. 149, 2016, doi: 10.22441/sinergi.2016.2.009.
- [22] DESTALIA SALLYNA, “PERENCANAAN JARINGAN LONG RANGE (LORA) PADA FREKUENSI 920 MHz – 923 MHz DI KOTA BANDUNG,” vol. 7, no. 1, pp. 933–940, 2020.
- [23] P. Devi, D. Istianti, S. Y. Prawiro, N. Bogi, A. Karna, and I. A. Nursafa, “Analisis Performansi Teknologi Akses LPWAN LoRa Antares Untuk Komunikasi Data End Node,” *Citee 2019*, pp. 22–26, 2019.
- [24] “WNDW: Line of sight - OnnoCenterWiki.”  
[https://lms.onnocenter.or.id/wiki/index.php/WNDW:\\_Line\\_of\\_sight](https://lms.onnocenter.or.id/wiki/index.php/WNDW:_Line_of_sight)  
 (accessed Jul. 29, 2021).
- [25] H. Farizi, “Impact of Mppm Modulation on Non-Line of Sight Channel,” pp. 1–8, 2020.
- [26] A. Junaidi, “Internet of Things, Sejarah, Teknologi Dan Penerapannya : Review,” *J. Ilm. Teknol. Inf.*, vol. IV, no. 3, pp. 62–66, 2015.
- [27] A. R. H. Hussein, “Internet of Things (IOT): Research challenges and future applications,” *Int. J. Adv. Comput. Sci. Appl.*, vol. 10, no. 6, pp. 77–82, 2019, doi: 10.14569/ijacsa.2019.0100611.
- [28] H. Santoso, *MONSTER ARDUINO 3 - Implementasi Internet Of Things pada Jaringan GPRS*. ELANGSAKTI.com, 2018.
- [29] A. S. Rozik, A. S. Tolba, and M. A. El-Dosuky, “Design and Implementation of the Sense Egypt Platform for Real-Time Analysis of IoT Data Streams,” *Adv. Internet Things*, vol. 06, no. 04, pp. 65–91, 2016, doi:

10.4236/ait.2016.64005.

- [30] H. Barragán, “Wiring : Prototyping Physical Interaction Design,” *Interact. Des. Institute, Ivrea, Italy*, no. June, p. 43, 2004, [Online]. Available: <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Wiring:+Prototyping+Physical+Interaction+Design#0>.
- [31] A. Agustian, “Rancang Bangun Miniatur Stasiun Cuaca Berbasis Mikrokontroler,” *Skripsi*, 2018.