



REFERENSI

- [1] T. Guardian, “Australians could be charged for exporting energy from rooftop solar panels to the grid.” <https://www.theguardian.com/environment/2021/mar/25/australians-could-be-charged-for-exporting-energy-from-rooftop-solar-panels-to-the-grid>.
- [2] K. N. Nwaigwe, P. Mutabilwa, and E. Dintwa, “An overview of solar power (PV systems) integration into electricity grids,” *Mater. Sci. Energy Technol.*, vol. 2, no. 3, pp. 629–633, 2019, doi: 10.1016/j.mset.2019.07.002.
- [3] A. Cabrera-tobar and E. Bullich-massagué, “Active and Reactive Power Control of a PV Generator for Grid Code Compliance,” 2019, doi: 10.3390/en12203872.
- [4] P. Arivubrakan and K. Prema, “The routing based protocol technique for enhancing the performance metrics using MQTT in the Internet of Things,” *Mater. Today Proc.*, no. xxxx, 2020, doi: 10.1016/j.matpr.2020.11.070.
- [5] “What is MQTT and How It Works.” <https://randomnerdtutorials.com/what-is-mqtt-and-how-it-works/>.
- [6] J. Fiaidhi and S. Mohammed, “Virtual care for cyber–physical systems (VH_CPS): NODE-RED, community of practice and thick data analytics ecosystem,” *Comput. Commun.*, vol. 170, no. February, pp. 84–94, 2021, doi: 10.1016/j.comcom.2021.01.029.
- [7] “Getting Started with Node-RED on Raspberry Pi,” [Online]. Available: <https://randomnerdtutorials.com/getting-started-with-node-red-on-raspberry-pi/>.
- [8] I. Allafi and T. Iqbal, “Design and implementation of a low cost web server using ESP32 for real-time photovoltaic system monitoring,” *2017 IEEE Electr. Power Energy Conf. EPEC 2017*, vol. 2017-Octob, pp. 1–5, 2018, doi: 10.1109/EPEC.2017.8286184.
- [9] “Getting Started with the ESP32 Development Board.” <https://randomnerdtutorials.com/getting-started-with-esp32/>.
- [10] “No TitleESP32 DevKit ESP32-WROOM GPIO Pinout.” <https://circuits4you.com/2018/12/31/esp32-devkit-esp32-wroom-gpio-pinout/>.
- [11] S. Pal and K. B. Sahay, “Modeling of Solar Energy Grid Integration System Using Typhoon HIL,” *iEECON 2018 - 6th Int. Electr. Eng. Congr.*, vol. 1, pp. 3–7, 2018, doi: 10.1109/IEECON.2018.8712253.
- [12] H. Li, Y. Xu, S. Adhikari, D. T. Rizy, F. Li, and P. Irminger, “Real and reactive power control of a three-phase single-stage PV system and PV voltage stability,” *IEEE Power Energy Soc. Gen. Meet.*, pp. 1–8, 2012, doi: 10.1109/PESGM.2012.6343965.
- [13] M. M. Islam *et al.*, “Microcontroller based power inverter for grid connected PV system,”



Proc. 2012 *Int. Conf. Green Ubiquitous Technol. GUT 2012*, pp. 45–49, 2012, doi: 10.1109/GUT.2012.6344185.

- [14] Kementrian ESDM, “Aturan Jaringan Sistem Tenaga Listrik (Grid Code),” *Menteri Energi dan Sumber Daya Miner. Republik Indones.*, no. 3, pp. 417–607, 2020, [Online]. Available: <https://jdih.esdm.go.id/storage/document/PM ESDM No 20 Tahun 2020.pdf>.
- [15] Z. Forecaster, “ESP32 Analog To Digital Conversion Accuracy,” 2020. .
- [16] R. N. Tutorials, “ESP32 ADC – Read Analog Values with Arduino IDE.” .
- [17] “Solar Irradiance.” <https://www.alternative-energy-tutorials.com/solar-power/solar-irradiance.html>.
- [18] S. Adhikari, F. Li, S. Member, and H. Li, “P-Q and P-V Control of Photovoltaic Generators in Distribution Systems,” no. November, 2015, doi: 10.1109/TSG.2015.2429597.