

DAFTAR PUSTAKA

- [1] S. Suroso, W. Winasis, D. T. Nugroho, dan W. T. Cahyanto, "Power loss analysis of current-modules based multilevel current-source power inverters," *TELKOMNIKA Telecommun. Comput. Electron. Control*, vol. 17, no. 1, hlm. 453–462, Feb. 2019, doi: 10.12928/telkomnika.v17i1.11601.
- [2] T. Noguchi, "Common-emitter topology of multilevel current-source pulse width modulation inverter with chopper-based DC current sources," *IET Power Electronics*, vol. 4, no. 7, hlm. 759–766, Sep. 2011, doi: 10.1049/iet-pel.2010.0008.
- [3] S. Suroso dan E. R. Supriyanti, *Inverter Daya Listrik*. Sleman, Indonesia: Zahira Media Publisher, 2018.
- [4] A. Waspodo, A. Warsito, dan M. Facta, "Analisis Unjuk Kerja Inverter Frekuensi Tinggi dan Tegangan Tinggi dengan PSIM 4.1," Skripsi, Jur. Tek. Elektro, Univ. Diponegoro, Semarang, Indonesia, 2011.
- [5] S. Suroso dan T. Noguchi, "Five-level common-emitter inverter using reverse-blocking IGBTs," *TELKOMNIKA (Telecommunication Computing Electronics and Control)*, vol. 10, no. 1, hlm. 25–32, Feb. 2012, doi: <http://doi.org/10.12928/telkomnika.v10i1.757>.
- [6] I. Husnaini, M. R. Effendy, dan R. Adawiyah, "Komparasi Multilevel Inverter Satu Fasa," *Jurnal EECCIS (Electrics, Electronics, Communications, Controls, Informatics, Systems)*, vol. 13, no. 2, hlm. 95–99, 2019, doi: <https://doi.org/10.21776/jeeccis.v13i2.596>.
- [7] A. S. Sedra dan K. C. Smith, *Microelectronic Circuits*, 5th ed. New York, NY, USA: Oxford University Press.
- [8] Invertek Energy, "IGBT vs. MOSFET comparison," *Invertek Energy*. [Online]. Tersedia: <https://www.invertekenergy.com/igbt-vs-mosfet-comparison-which-device-fits-your-inverter-ups-application/>. [Diakses: 20 Sep. 2025].
- [9] RF Wireless World, "Voltage source inverter vs. Current source inverter," *RF Wireless World*. [Online]. Tersedia: <https://www.rfwireless-world.com/Terminology/Voltage-source-inverter-vs-Current-source-inverter.html>. [Diakses: 20 Sep. 2025].
- [10] Electronics Coach, "Voltage Source Inverter," *Electronics Coach*. [Online]. Tersedia: <https://electronicscoach.com/voltage-source-inverter.html>. [Diakses: 20 Sep. 2025].
- [11] Suroso dan T. Noguchi, "Common-emitter topology of multilevel current-source pulse width modulation inverter with chopper-based DC current sources," *IET Power Electron.*, vol. 4, no. 7, hlm. 759–766, Agu 2011, doi: 10.1049/iet-pel.2010.0008.
- [12] T. Noguchi dan Suroso, "New topologies of multi-level power converters for use of next-generation ultra high-speed switching devices," dalam 2009 IEEE Energy Conversion Congress and Exposition, San Jose, CA: IEEE, Sep 2009, hlm. 1968–1975. doi: 10.1109/ECCE.2009.5316432.

- [13] T. Funaki dkk., "Power Conversion With SiC Devices at Extremely High Ambient Temperatures," *IEEE Trans. Power Electron.*, vol. 22, no. 4, hlm. 1321–1329, Jul 2007, doi: 10.1109/TPEL.2007.900561.
- [14] D. M. Brod dan D. W. Novotny, "Current Control of VSI-PWM Inverters," *IEEE Trans. Ind. Appl.*, vol. IA-21, no. 3, hlm. 562–570, Mei 1985, doi: 10.1109/TIA.1985.349711.
- [15] W. A. Adi Widiastara, I. W. Rinas, dan I. W. Sukerayasa, "Analisis Pengaruh Total Harmonic Distortion Terhadap Losses dan Efisiensi Transformator RSUD Kabupaten Klungkung," *Maj. Ilm. Teknol. Elektro*, vol. 16, no. 1, hlm. 107, Sep 2016, doi: 10.24843/MITE.1601.15.
- [16] I. W. Rinas, "Studi analisis losses dan derating akibat pengaruh THD pada gardu transformator daya di Fakultas Teknik Universitas Udayana," *Majalah Ilmiah Teknologi Elektro*, vol. 11, no. 1, pp. 23–29, 2012.
- [17] J. Rodriguez, Jih-Sheng Lai, dan Fang Zheng Peng, "Multilevel inverters: a survey of topologies, controls, and applications," *IEEE Trans. Ind. Electron.*, vol. 49, no. 4, hlm. 724–738, Agu 2002, doi: 10.1109/TIE.2002.801052.
- [18] Guo Z. dan Kurokawa F., "Inverter Dead-Time Compensation and Control Scheme for Reducing Harmonic Distortion and Improving Conversion Efficiency," *IEEE Trans. Ind. Appl.*, vol. 130, no. 1, hlm. 26–36, 2010, doi: 10.1541/ieejias.130.26.
- [19] M. Abu-Khaizaran dan P. Palmer, "Commutation in a High Power IGBT Based Current Source Inverter," dalam *2007 IEEE Power Electronics Specialists Conference*, Orlando, FL, USA: IEEE, 2007, hlm. 2209–2215. doi: 10.1109/PESC.2007.4342351.
- [20] Detik.com, "Daya Listrik: Pengertian, Rumus, dan Contoh Soalnya," *Detik.com*. [Online]. Tersedia: <https://www.detik.com/edu/detikpedia/d-7326108/daya-listrik-pengertian-rumus-dan-contoh-soalnya>. [Diakses: 20 Sep. 2025].
- [21] W. K. M. B. Tinambunan and R. Rahmani, "Analisis efisiensi pembangkit listrik tenaga surya (PLTS) terhadap penyinaran matahari menggunakan Solar Power Meter," *Jurnal Teknik Elektro dan Komputer*, vol. 12, no. 3, pp. 189–194, Dec. 2023, doi: 10.35793/jtek.v12i3.52879.
- [22] N. N. Gianza, D. Darjat, dan H. Afrisal, "Perancangan Inverter Satu Fasa Topologi Jembatan Penuh dengan Rangkaian Bootstrap," *Transient J. Ilm. Tek. Elektro*, vol. 10, no. 3, hlm. 434–441, Sep 2021, doi: 10.14710/transient.v10i3.434-441.
- [23] A. -, G. D. Ramady, M. S. Sungkar, Y. A. Nuhgraha, dan A. Wirjawan, "Reduksi Rugi-Rugi Pensaklaran pada Konverter Dc-Dc Zeta dengan Teknik Zero Voltage Transition," *Power Elektron. J. Orang Elektro*, vol. 12, no. 1, hlm. 49, Jan 2023, doi: 10.30591/polektro.v12i1.4378.
- [24] B. Mondal dan A. Karuppaswamy, "Analysis of inverter output current ripple and design of inverter-side output filter inductor for grid-connected applications," *TechRxiv*, Feb. 2024. doi: 10.36227/techrxiv.170793860.00142902/v1.
- [25] M. F. A. Ramadhan, H. A. Rahman, M. Mulyadi, dan R. Rahmadhani, "Analisis Performa Inverter Satu Fasa Tipe H-Bridge Menggunakan Kendali

- Sinusoidal PWM,” *Jurnal Rekayasa Teknologi dan Sains (RTS)*, vol. 1, no. 2, hlm. 1–9, 2018. [Online]. Tersedia: <https://jurnal.usk.ac.id/RTP/article/view/5647/4863>.
- [26] A. Akbar, M. Fikri, dkk., “Aplikasi Power Inverter Sebagai Pengubah Tegangan DC Menjadi AC,” *e-prints UMSB*. [Online]. Tersedia: <http://eprints.umsb.ac.id/2659/1/20170006%20Ali%20Akbar%20dkk.pdf>. [Diakses: 20 Sep. 2025].
- [27] Y. Wei, Q. Zhang, and L. L. Cheng, "New Methods for Fourier Analysis and Fourier Synthesis," *IEEE Signal Processing Letters*, vol. 6, no. 12, pp. 315–317, Dec. 1999, doi: 10.1109/97.803433.
- [28] PowerSim Inc., "PSIM: The Leading Simulation Software for Power Electronics and Motor Drives," PowerSim Inc., [Online]. Tersedia: <https://powersimtech.com/>. [Diakses: 22-Sep-2025].

