

# Smart Street Light System

**Omkar V. Ambre, Omkar D. Devalkar, Gitanjali Korgaonkar, Sameet R. Parab, Rohit A. Howale**

Department of EXTC

Vasantdada Patil Pratishthan's College of Engineering and Visual Arts, Mumbai, India

**Abstract:** *Imagine walking down a street at night, and suddenly the street lights start to dim to save energy. You may wonder how this is possible it's all thanks to the smart street light system using Internet of Things (IoT) technology. This advanced system integrates various devices such as sensors and cameras to optimize and automate street lighting, providing an efficient and cost-effective solution by using IoT sensors, street lighting can be remotely monitored and controlled, making it possible to adjust lighting levels dynamically based on traffic patterns and weather conditions. This technology offers numerous benefits, including energy savings, improved public safety, and reduced carbon footprint, making our cities more sustainable and environmentally friendly. Overall, the smart street light system using IoT is a game-changer in urban development. It enhances our infrastructure and promotes sustainable growth, providing a better quality of life for all citizens.*

**Keywords:** Smart Street lights, IoT technology, Sustainable development

## REFERENCES

- [1]. P. P. F. Dheena, G. S. Raj, G. Dutt and S. V. Jinny, "IOT based smart street light management system" 2017 IEEE International Conference on Circuits and Systems (ICCS), Thiruvananthapuram, India, 2017, pp. 368-371, doi: 10.1109/ICCS1.2017.8326023.
- [2]. O. Rudrawar, S. Daga, J. R. Chadha and P. S. Kulkarni, "Smart Street lighting system with light intensity control using power electronics," 2018 Technologies for Smart-City Energy Security and Power (ICSESP), Bhubaneswar, India, 2018, pp. 1-5, doi: 10.1109/ICSESP.2018.8376692.
- [3]. P. Arjun, S. Stephenraj, N. N. Kumar and K. N. Kumar, "A Study on IoT based Smart Street Light Systems," 2019 IEEE International Conference on System, Computation, Automation and Networking (ICSCAN), Pondicherry, India, 2019, pp. 1-7, doi: 10.1109/ICSCAN.2019.8878770.
- [4]. Vaishali Gupta, Krutika Thakur, Ritesh Thakur, "Based Smart Street Lights" International Journal of Research (IJR), Volume 2, Issue 10, October 2015.
- [5]. Snehal Bhosale, Komal Gaware, Pradnya Phalke, Dipali Wadekar, Pallavi Ahire, "IoT based Dynamic Control of Street Lights for Smart City", International Research Journal of Engineering and Technology (IRJET), Vol. 4, No. 5, 2017, pp.1181-1183
- [6]. B. Abinaya, S. Gurupriya and M. Pooja, "Iot based smart and adaptive lighting in street lights," 2017 2nd International Conference on Computing and Communications Technologies (ICCCT), Chennai, India, 2017, pp. 195-198
- [7]. Sindhu.A.M, Jerin George, Sumit Roy, Chandra J, "Smart Streetlight Using IR Sensors" IOSR Journal of Mobile Computing & Application (IOSR-JMCA) e-ISSN: 2394- 0050, P-ISSN: 2394-0042. Volume 3, Issue 2.
- [8]. Manish Kumar, Ravinder, Ritula, "Zigbee Based Smart Street Light Control System Using Lab VIEW" International Journal of Innovative Research in Science, Engineering and Technology Vol. 5, Issue 4, April 2016
- [9]. J. Mohlnikova, Electric Energy Savings and Light Guides, Energy & Environment, 3rd IASME/WSEAS International Conference on, Cambridge, UK, February 2008, pp.470-474