

A
MINI PROJECT REPORT on
LASER BASED BORDER SECURITY SYSTEM

Submitted in partial fulfilment of the Requirements for the award of
Degree of
Bachelor of Technology in
ELECTRONICS & COMMUNICATION ENGINEERING
By

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under the esteemed guidance
of
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2024-2025



CERTIFICATE

This is to certify that the work which is being presented in the B. Tech. Mini Project Report entitled “**LASER BASED BORDER SECURITY SYSTEM**” being submitted by **MADIKANTI MOHANASRIJA (22681A0436)** impartial fulfillment of the requirements for the award of the Bachelor of Technology in “**Electronics & Communication Engineering**” and submitted to the Department of Electronics & Communication Engineering of Christu Jyothi Institute of Technology and Science, Jangaon.

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I hereby declare that the project entitled—"**LASER BASED BORDER SECURITY SYSTEM**", which is being submitted as Mini Project in Electronics and Communication Engineering to Christu Jyothi Institute of Technology & Science, is an authentic record of our genuine work done under the guidance of K.Chiranjeevi, Assistant Professor of ECE Dept.

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ABSTRACT

The laser-based border security system is an advanced surveillance technology designed to detect and prevent unauthorized crossings along secured perimeters. This system utilizes strategically placed laser emitters and receivers to form an invisible barrier, which, when disrupted, triggers real-time alerts and activates surveillance mechanisms. The key components include laser sensors, surveillance cameras, an alarm system, and an integrated control system, ensuring comprehensive monitoring. This technology offers high accuracy, low maintenance, and effective operation in diverse environmental conditions. It is widely

applicable in securing international borders, military zones, and high-security installations. By providing an automated and immediate response to potential intrusions, the laser-based border security system significantly enhances national security and border management.

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