



IR-NIYANTRAC  
CLOUD



Smart Area Lighting  
in Railways campus



Smart Water  
Pump Monitoring

Net Zero Switch is a comprehensive IoT-based solution that enables smart management of street lights, platform lights, and electrical assets on railway platforms. It is seamlessly integrated with Railways' **IR-Niyantrac** Cloud to provide a unified view of all assets and their performance.



## The solution includes the following key components

- **Net Zero Switch wireless controllers:** These controllers are installed on street lights, platform lights, and electrical assets to collect data on energy consumption, operational status, and other parameters. 30:70 Lighting Circuits can be operated once integrated with NTES time using CRIS IR-Niyantrac APIs.
- **SENSEnuts IoT Platform:** This platform provides a cloud-based platform for managing and analyzing the data collected from the wireless controllers. It also provides a variety of tools for optimizing energy usage and reducing costs.
- **IR-Niyantrac Cloud:** This cloud-based platform provides a unified view of all assets and their performance on railway platforms. It also provides a variety of tools for managing and optimizing railway operations.



## The Net Zero Switch can be used to implement a variety of energy efficiency measures, such as:

- Dimming or turning off lights when not in use
- Adjusting the brightness of lights based on ambient light levels
- Scheduling lights to turn on and off at specific times
- Identifying and repairing faulty lights and other electrical assets



## Benefits of the Net Zero Switch:

- Reduced energy consumption and costs
- Improved energy efficiency
- Extended lifespan of electrical assets
- Reduced maintenance costs
- Improved safety and security

The Net Zero Switch can also be used to collect data on energy consumption, which can be used to identify areas for further improvement.



## How to Use the Net Zero Switch Solution

The Net Zero Switch solution is easy to use. Railway operators simply need to install the wireless controllers on their street lights, platform lights, and electrical assets. The wireless controllers will automatically start collecting data and sending it to the SENSEnuts IoT Platform.

Once the data is in the SENSEnuts IoT Platform, railway operators can use the platform's tools to visualize the data, generate reports, and identify trends. The platform also provides a variety of tools for optimizing energy usage and reducing costs.

For example, railway operators can use the platform to create rules for dimming street lights during off-peak hours or turning off platform lights when there is no activity. The platform can share detailed insights of the usage & energy consumption of all electrical assets.