

LoRaWAN: Long Range Wide Area Network



wista.de

Base

LoRaWAN is an excellent solution for Internet of Things (IoT) applications that require wireless, energy-saving and cost-effective connectivity. Setting up a LoRaWAN network forms the basis for a wide range of applications in the areas of smart city, agriculture, industry, logistics and environmental monitoring.

Objectives

- Promoting Innovation in applications and services
- Provide a connectivity solution that is secure, far-reaching, permeates buildings, scalable, and conserves resources (energy and cost).

Implementation

In order to achieve the best possible LoRaWAN coverage, four LoRaWAN gateways were installed on the roofs of buildings in the technology park. A suitable IoT platform was set up to display the data transmitted via LoRaWAN to the gateways and then to a cloud server.

The LoRa network was renewed in 2024. Hardware was replaced to enable the upgrade to 4G as a transmission path for data transfer. Since then, Berlin Energie Netz und Service GmbH (BE-NuS) has been operating the network. This has enabled WISTA to participate in the Berlin-wide LoRaWAN of InfraLab (an association of infrastructure operators and also Berlin's regional companies).

Impact

1. Comprehensive coverage with LoRaWAN at excellent signal strength
2. Availability of an IoT-platform for sensors and actuators
3. Transmission network for the digital twin

Project period

2018:

Concept phase, installation and initial commissioning

2024:

Renewal and adjustment of the IoT-platform

since 2024:

Utilisation

Project partner



Contact

Pascal Schwerk

Team Innovation
schwerk@wista.de

wista.de

A project by:

