



Factsheet

# Low Power Network

**swisscom**

Enable, drive and protect  
your business.



# The Low Power Network (LPN) is a LoRaWAN<sup>®</sup> radio data network operated by Swisscom.

**Setting up and operating your own LoRaWAN<sup>®</sup> network is expensive and time-consuming. The Swisscom Low Power Network is an affordable and efficient alternative, offering the most extensive LoRaWAN<sup>®</sup> connectivity in Switzerland.**

It is specially designed for IoT applications that transmit small data volumes. The resulting benefits permit an array of new IoT applications for the business customer sector, including smart metering, critical infrastructure monitoring, logistics tracking, room occupancy and air monitoring.

A LPN is ideal for endpoints that require a long battery life and only have space for small, light-weight batteries.

The transmission of small data packets ensures low power consumption and still enables a long range. The LoRaWAN<sup>®</sup> network opens up valuable insights from the huge amounts of data generated by your IoT endpoints. We'll help you maximise your optimisation potential to create new revenue streams and make data-driven business decisions.



## **Professional operation and maintenance 24/7**

Our specialists monitor the largest nationwide LoRaWAN<sup>®</sup> network 24/7, ensuring optimum reliability and maximum availability throughout Switzerland.



## **High flexibility through plug-and-play customer gateways.**

LPN enables high scalability with the flexibility of local expansion using customer gateways. With the LPN gateways, you can easily extend or improve coverage, for example, in basements. All our gateways need is a connection to the main supply; we'll do the rest. We offer equipment for indoor and outdoor applications as well as applications outside Switzerland.



## **Only Swisscom offers LoRaWAN<sup>®</sup> satellite connectivity throughout Switzerland.**

Across Switzerland, the option to use satellites in a LoRaWAN<sup>®</sup> context is only possible with Swisscom. This means that you benefit from even better network coverage, as the satellites can also be used to connect more remote areas.



## **Installations in rural regions or abroad.**

LPN roaming enables communication with Swisscom roaming partners. With the satellite options, we also offer almost Europe-wide endpoint accessibility. You benefit from the fact that we offer one-stop solutions, which, among other things, saves you contract negotiations and reduces complexity.

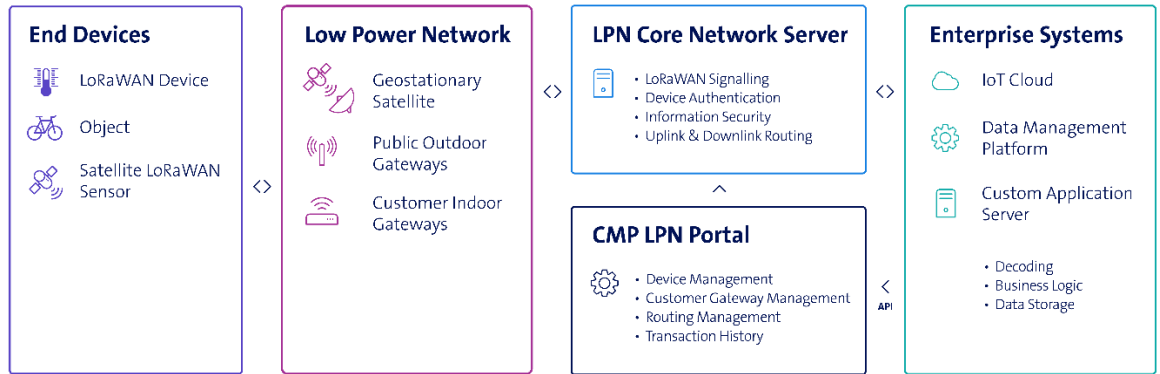


## **High energy efficiency keeps operating costs down.**

LoRaWAN<sup>®</sup> technology helps you maximise endpoint uptime. Batteries can last up to ten years.



## How does a Low Power Network work



## Facts & Figures

### Basic services



**Bi-directional communication between your endpoints and your application – ideal for long distances and small data volumes**

- LPN connectivity with uplinks and downlinks
- Geo-redundant network server
- Access to the self-service LPN portal
- API access point to the network server
- Secure data transmission with AES-128 encryption
- Support for LoRaWAN endpoint classes A, B, C
- Simple endpoint management – central endpoint management for endpoints and Web or API gateway enables fast and easy onboarding of endpoints
- Transaction history of endpoint communication
- Alerting – automatic notification of status changes on endpoints or gateways
- Diagnostics and reporting using aggregated statistics for endpoints and customer gateways
- Flexible pricing models for different use cases



## Options



### The options of our Low Power Network are tailored to your needs

- IoT Flow – payload decoding including connection to specific cloud providers (e.g. Azure and AWS)
- LPN roaming – connect endpoints abroad to partner networks directly in the LPN Connectivity Management Platform with just one contract.  
For available countries, see <http://www.swisscom.ch/lpn>
- Satellite communication (specific endpoints required) – you can reach remote locations efficiently using satellites for the LPN
- Geolocation by triangulation (TDOA, RSSI) – energy efficient endpoint localisation without GPS
- Multicast – synchronous activation of endpoint groups via downlink
- FUOTA (Firmware Update Over The Air) – centrally manage and update firmware on the endpoints

## Supplementary services



### Our products and services go beyond connectivity – we will be happy to advise you on an integrated solution.

- LPN indoor customer gateways – simple and affordable options for indoor coverage using easy-to-install plug-and-play gateways with 4G mobile backhauling for locations not covered by the outdoor network
- LPN outdoor customer gateways – custom network densification or expansion for sites that need more coverage
- Customer-specific coverage calculations
- On-site customer training
- IoT consulting
- Data visualisation and system integrations

You can find more information and get in touch with our experts here: <https://swisscom.ch/lpn>