

SL-Gateway

Mono gateway system - features and capabilities

SL-gateway is a concentrator based on the Multitech® Conduit™ hardware, and enhanced with a software solution by Sensing Labs. The sole aim of this software is to **facilitate the deployment of a LoRaWAN™ network**, by embedding a lot of smarts and automations whilst giving you the tools to set it up for your specific application (Authentication security, 3G or IP back-end connectivity, ...).

SL-gateway is only able to operate as a single gateway system, well suited for a single **building or farm applications**, but less suited city wide networks. If you need wider deployment and connectivity, Sensing-Labs works hand in hand with many Network Server providers and we'll be able to help you.

This level of control and simplification is achieved by integrating two key LoRaWAN™ network elements into SL-gateway:

Network Server (NS) Low level LoRaWAN™ communication processes with the end-devices, such as activating devices, adapting data-rate, changing RF output power...

Application Server (AS) Route the right radio transmissions from the NS to the customer's system. SL-gateway adds several functionalities to this layer, such as the embedded codecs and the powerful API.

The NS and AS are usually 3rd party cloud based services, and most concentrators are only 'tunnels', forwarding the radio packets to the Cloud NS.

The embedded codecs unlock the advanced functionalities of the Senlab end-node, such as the data-logging, giving you more measurement points whilst increasing further the Senlab battery life.

Capabilities

Range:	Up to 15km
Capacity	~500 end-nodes
Radio band	868 MHz
Number of radio channels	8 (3-LoRa + 5-Semtech)
Adaptive data rate	Data rate 0 to Data rate 5
Ethernet	Static IP Or DHCP
Cellular	Public or Private

