



**Building end-to-end secured
private LoRaWAN™ networks
in AWS Cloud**

www.thethingsindustries.com

Introduction

Building end-to-end secured private LoRaWAN™ networks on AWS

The Things Industries brings you the required resources for your LoRaWAN™ development, while we help control costs and speed up time-to-market. Our enterprise grade stack will meet your requirements for security, scalability and robustness. Our customers rate us high on product quality and support provided.

The essentials

We offer a feature-complete LoRaWAN network server that ticks all the boxes.

- Supports LoRaWAN 1.0.x, 1.1.x
- Supports LoRaWAN device Classes A, B and C
- Supports LoRaWAN gateways using open source UDP and Basics Station protocols
- Supports LoRaWAN Regional Parameters for global deployments. Supports custom frequency plans.
- Supports LoRaWAN Backend Interfaces for roaming and trusted join
- Supports LoRaWAN multicast, fragmented data block transfer and time synchronization
- Follows LoRaWAN Network Reference Model
- Offers comprehensive debugging tools for quick root cause analysis
- Offers to set fine-grained device level MAC and PHY settings
- Offers an open source device repository with pre-defined payload formats

OUR KEY DIFFERENTIATORS

Deployment scenarios



(Dedicated) Cloud Hosted

Software as a Service, deployed on The Things Industries' AWS Cloud.



Virtual Private Cloud

Run the Network Server in your own AWS cloud account.



On-Site

The routing services can run locally, or even embedded on your gateway.

Security configurations



Secure element

We offer Microchip secure elements containing TTI root keys enabling end-to-end security.



Join Server Flexibility

Control keys in your own domain, or let us in a certified environment. Easily switch networks.



Firmware Over The Air Updates

Extend your devices' life cycle by running firmware updates over LoRaWAN.

Advanced features



Geolocation

Integrate with 3rd party geo-localization services using LoRa TDOA, WiFi and BLE RSSI.



IoT platform integrations

Zero-effort interactions with AWS IoT Core and flexible APIs.



Peering

Expand your reach by exchanging traffic between The Things Network and your private LoRaWAN network.