Important Notes for LoRaWA...

1. Proper Installation of the LoRa Antenna

LoRa communication range is highly dependent on antenna installation. For optimal performance:

· Install the antenna as high as possible and avoid placing it close to the ground.

· Install the antenna in an open area and keep it away from metal objects, walls, and large equipment.

· Physical obstacles may significantly reduce signal strength and affect communication reliability.

2. Connect the Antenna Before Powering On

Always connect the LoRa antenna before powering on the gateway.

Powering on the gateway without an antenna connected may cause RF energy reflection, which can damage the RF power amplifier (PA) or LoRa module.

3. Verify LoRaWAN Regional Parameters

The LoRaWAN gateway, end devices, and Network Server must use identical regional parameters.

Supported frequency plans:CN470/AU915/US915/EU868/AS923/AS923_1/AS923_2/AS923_3

For CN470, AU915, and US915, the sub-band configuration must also be consistent across the gateway, end devices, and Network Server.

4. Verify Device Class and Activation Mode

The LoRaWAN device class and activation method must match the Network Server configuration.

Supported:

· Device Class: Class A / Class B / Class C

· Activation Mode: OTAA / ABP

Incorrect configuration may result in network join failure or unstable communication.

5. Validate Network Performance Before Deployment

Before large-scale deployment:

1. Verify end device join status.
2. Check uplink communication stability.
3. Evaluate actual coverage and communication quality.

Complete large-scale deployment only after confirming stable network performance.