Advantech AE Technical Share Document

Date	2019/11/28	SR#	1-3775490501
Category	□FAQ ■SOP	Related OS	N/A
Abstract	How to connect WISE-46	510 with WISE-60	610?
Keyword	WISE, LoRaWAN		
Related Product	WISE-4610 series, WISE	2-6610	

Problem Description:

This document shows that how to connect WISE-4610 with WISE-6610, and receive data result.

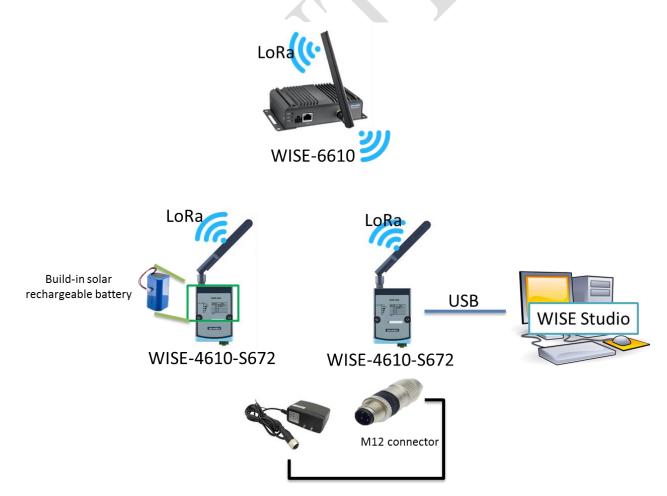


Figure 1. Topology of this scenario.

■ <u>Brief Solution - Step by Step</u>:

Step 1. Enter the WISE-6610 gateway. Default IP:192.168.1.1 Account: root Password: root

S Router	× +		
$\leftrightarrow \rightarrow C $	▲ 不安全 https://192.168.1.1/I	☆ 🕂 :	
	Login Username root Password Login		

	1		
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Step 2. Go to "user mode".

VRRP Expansion Port : R5-232 Binary Input : Off Binary Input : Off Binary Input : Off Static Routes Firewall VAT OpenVPN Serial Number : LKA3174312 Profile : Standard Supply Voltage : 24.0 V Temperature : 40 °C Time : 2019-06-11 09:56:09 Uptime : 1 day, 0 hours, 20 minutes > Licenses « Services Expansion Port Scripts Automatic Update Sustomization Jsers Change Profile Change Configuration Restore Configuration		N Router	
Network HCP Psec DynoNS System Log Configuration AN AN AN AN RRP PPOE Backup Routes Static Routes Static Routes Static Routes Strewall AT DpenVPN Psec SRE 22TP Pser Sres Schange Profile Change Password Ser Modules Change Profile Change Password Set Real Time Clock Backup Configuration Restore Configuration Rest	tatus	General Status	
DHCP IP Address : 192.168.1.1 / 255.255.255.0 Psec IP v6 Address : V4.853gned System Log NAC Address : 74.FE.481396152 KA Address : 74.FE.481396152 AN RE AN RRP DPPDE Binary Input : Off Backup Routes System Information Static Routes System Information Firewall : Capansion Port VAT Serial Number SRE : Standard Supply Voltage : 2410-06-1109:56:09 Uptime : 1 day, 0 hours, 20 minutes Services : Vicenses « Supply Voltage : 1 day, 0 hours, 20 minutes witcensized : Vicenses «	General	Primary LAN	
AN /RRP //RP //RP //RP //RP //RP //RP //R	DHCP Psec DynDNS	IPv6 Address : Unassigned MAC Address : 74:FE:48:39:61:52 Rx Data : 119.7 KB Tx Data : 60.0 KB	
AN //RRP PPpE Binary Input : 0ff Binary Output : 0ff Binary Output : 0ff Binary Output : 0ff System Information Firmware Version : 6.1.2 (2017-06-12) Serial Number : LKA3174312 Profile : Standard Supply Voltage : 24.0 V Temperature : 240 eV Temperature : 240 eV Temperature : 2019-06-11 09:56:09 Uptime : 1 day, 0 hours, 20 minutes >> Licenses * Services Expansion Port Scripts Automatic Update Sustomization Jsers Change Profile Change Password Set Real Time Clock Backup Configuration Restore Configuration Restore Configuration	Configuration		- 1
Static Routes System Information Firewall System Information NAT Serial Number : LKA3174312 OpenVPN Serial Number : LKA3174312 Profile : Standard Supply Voltage : 24.0 V Temperature : 40 °C Time : 2019-06-11 09:56:09 Uptime : 1 day, 0 hours, 20 minutes > PPTP > Services > Expansion Port Scripts Automatic Update Customization Users Change Profile Change Password Set Real Time Clock Backup Configuration Restore Configuration	LAN VRRP PPPoE Backup Routes	Expansion Port : RS-232 Binary Input : Off	
NAT Serial Number : LKA3174312 OpenVPN IPsec Supply Voltage : 24.0 V GRE : 2019-06-11 09:56:09 Uptime : 1 day, 0 hours, 20 minutes PPTP : Licenses « : Licenses « : Licenses « Services : Licenses « : Licenses « Expansion Port : Licenses « : Licenses « Scripts : Licenses « : Licenses · Automatic Update : Licenses · : Licenses · User Modules : Licenses · : Licenses · Change Profile : Change Password : Licenses · Set Real Time Clock : Licenses · : Licenses · Backup Configuration : Licenses · : Licenses ·		System Information	
Expansion Port Scripts Automatic Update Customization User Modules Administration Users Change Profile Change Password Set Real Time Clock Backup Configuration Restore Configuration	NAT OpenVPN IPsec GRE L2TP PPTP	Serial Number : LKA3174312 Profile : Standard Supply Voltage : 24.0 V Temperature : 40 °C Time : 2019-06-11 09:56:09 Uptime : 1 day, 0 hours, 20 minutes	
Automatic Update Customization User Modules Users Change Profile Change Password Set Real Time Clock Backup Configuration Restore Configuration	Expansion Port		
Jser Modules Administration Jsers Change Profile Change Password Set Real Time Clock Backup Configuration Restore Configuration	· · ·		
Administration Users Change Profile Change Password Set Real Time Clock Backup Configuration Restore Configuration	Customization		
Users Change Profile Change Password Set Real Time Clock Backup Configuration Restore Configuration			
Change Profile Change Password Set Real Time Clock Backup Configuration Restore Configuration			
Set Real Time Clock Backup Configuration Restore Configuration			
lackup Configuration Lestore Configuration	-		
estore Configuration			
ndate Firmware	pdate Firmware		
	eboot ogout		

Step 3. If you need to upgrade the "LoRaWAN Gateway" function, DELETE first, then upload new file.

	User Modules
LoRaWAN Ga	teway 1.0.14 (20190531T032334Z) Delete
Node-RED	1.0.1 alfa (2017-03-13) Delete
New Module	選擇檔案 未選擇任何檔案 Add or Update

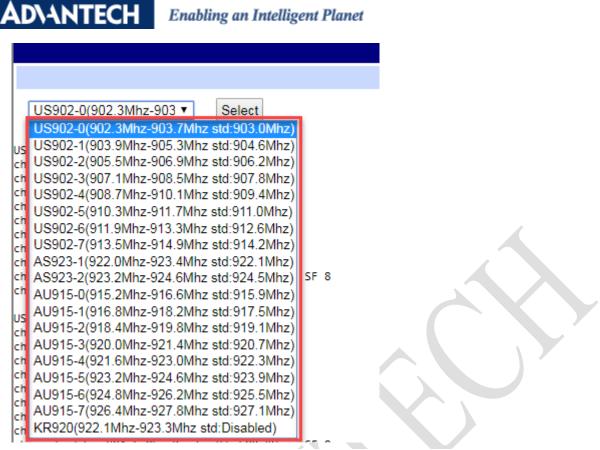
Step 4. Click "LoRaWAN Gateway" to enter the setting page.

Make sure all of these parameters are matching with the "RF module" setting on WISE-4610-Sxxx.

			l	oRaWAN Gateway Sett	ings
				LoRaWAN Radio Setti	ng
Model Name	WISE-6610-N100-A]			
Radio Enable	On 🔻				
Radio 0 Main Frequency(KHz)	902700]			
Radio 1 Main Frequency(KHz)	903400]			
	Enable	Radio Select	Offset(KHz)		
Channel 00	On 🔻	Radio 0 🔹	-400]	
Channel 01	On 🔻	Radio 0 🔻	-200]	
Channel 02	On 🔻	Radio 0 🔻	0 \$]	
Channel 03	On 🔻	Radio 0 🔹	200]	
Channel 04	On 🔻	Radio 1 🔹	-300]	
Channel 05	On 🔻	Radio 1 🔹	-100]	
Channel 06	On 🔻	Radio 1 🔹	100]	
Channel 07	On 🔻	Radio 1 🔹	300]	
	Enable	Radio Select	Bandwidth	SF	Offset(KHz)
Channel STD	On 🔻	Radio 0 🔹	500Khz •	8 🔻	300
	Enable	Radio Select	Bandwidth	Datarate (bps)	Offset(KHz)
Channel FSK	Off •	Radio 0 🔹	125Khz •	50000	0
Quick Setup Quick	setting LoRaWAN Radio.				
				LoRaWAN Gateway Set	ting
LoRaWAN Gateway Identifier	AA555A000000000				
	IP address	Upstream Port	Downstream Port		
Network server	127.0.0.1	1680	1680]	
Backup server	127.0.0.1	1680	1680]	
Backup Enable	Off •				
Backup Database Interval	5				
Save					

Or click on "quick setup" for default setting.

Channel STD	On 🔻	Radio
	Enable	Radio
Channel FSK	Off 🔹	Radio
Quick Setup Quick	k setting LoRaWAN Radio.	1
LoRaWAN Gateway Identifier	AA555A000000000	



Step 5. Select "LoRaWAN" for RF operation mode setting on WISE-4610.

WISE-4610-S672NA		
 Information 		
🗲 Configuration	Configuration	
ևոլ I/O Status	Information RF Module Data Update Time & Date Time Sync Co	ntro
	RF Module	
	Operation Region US	
	RF Operation Mode WISE Link v1	
	Activation Mode	

Step 6. A new tab will pop-up after click on "network server" > "enable" > "network server (http)".Account: root

Password: root

Navigation	
Router	
LoRaWAN Radio	LoRaWAN Network Server Enable
1 <u>Network Server</u> 2	On Enable LoRaWAN network server.
• Settings	LoRaWAN Server Listen Port
 <u>Network Server(http)</u> <u>Network Server(https)</u> 	1680 The LoRa network server listen port number (1 - 65535).
Upload Database	LoRaWAN Network Server HTTP Port
Download Database	8080 The LoRaWAN network server HTTP port number (1 - 65535).
Factory Reset Database	LoRaWAN Network Server HTTPS Port
MQTT.	8443 The LoRaWAN network server HTTPS port number (1 - 65535).
Application Server Licenses	LoRaWAN Web Username
Return to Router	root The user name for the LoRaWAN network server.
	LoRaWAN Web Password
	root The password for the LoRaWAN network server.
	Auto ADR Count
	50 The count used to Auto ADR function.
	LoRaWAN Network Server HTTPS Enable
	Off Enable HTTPS service.
	Save

× 🕃 Server A	dmin	× +					
) 不安全 192.168.1.1:803	80/admin#/dashbo	ard	☆	⊉ 0	۲	G	
登入 http://192.168.1.1 你與這個網站之間的 使用者名稱	L:8080 的連線不是私人連線		登入	取消			

1

Step 7. Create an end node device.

- If select "commissioned", which means the node will use OTAA mode for connecting with a gateway.
- If select "active nodes", which means the node will use ABP mode for connecting with a gateway.

S LoRaWAN Gateway	× 🕄 Server Admin 🛛 🗙	+
← → C 公 ① 不安全	192.168.1.1:8080/admin#/devices/list	
Server Admin		
A Infrastructure	Devices List	
🗞 Devices	Devices List	
C Profiles	DevEUI	
Commissioned	74FE48FFFF389587	
Activated (Nodes)	BP	
Ø Ignored		
Backends	>	
Received Frames		
Transmission Frames		
Click on "create" in devices.		
② LoRaWAN Gateway × ま Server Admin × + ← → C ① ① 不安金 192.168.1.1:8080/admin#/devices/list	A CONTRACTOR OF A CONTRACTOR O	★ ≠ 0 • 0 □ 1
Server Admin		

App Arg

WISE-S614

Last Join 2019-06-04T15:49:09Z 🔻 Add filter 🗸

1 - 1 of 1

1. DevAddr: the device address of an end node.

Devices List

V DevEUI

• Copy-pate from WISE-4610 "RF module" tab.

Profile

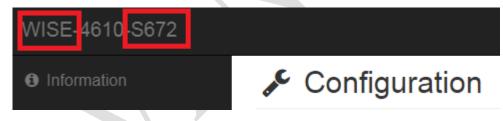
US902_V

Information	🖋 Configuration
Configuration	Information RF Module Data Update
	Positioning Firmware
	RF Module
	Operation US v
	RF LoRaWAN T
	Mode
	Activation ABP T

- 2. Profile: select the model name of the WISE-6610 which used for Network Server role.
 - In this demo, a US version is used to connect with WISE-4610NA version.

	Navigation		
	Router		
•	LoRaWAN Radio	Model Name	WISE-6610-N100-A

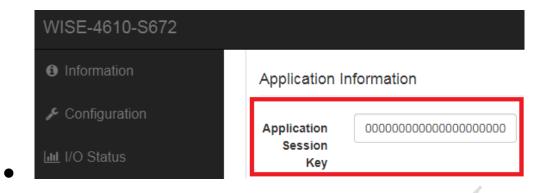
- 3. App Arguments: the I/O board of the end node.
 - In this demo, a WISE-S672 is used to connect with WISE-4610.



- 4. NwkSKey: the network service key address of an end node.
 - Copy-pate from WISE-4610 "RF module" tab.

WISE-4610-S672		
Information	Device EUI	74FE48FFFF38958D
Configuration	Network Session	000000000000000000000000000000000000000
Luu I/O Status	Key	

- 5. AppSKey: the application service key of an end node.
 - Copy-pate from WISE-4610 "RF module" tab.



6. Click on "save" to finish the setting.

← → C ① ▲ 不安全 19	2.168.1.1:8080/admin#/nodes/create
Server Admin	
Infrastructure Gateways Networks	Create new node
 ✓ Multicast Channels ▲ Events ⊗ Devices ✓ 	1 DevAddr* FF19D12F ✓ 2 Profile* US902_WISE6610_Handler ✓
@ Profiles	3 App Arguments WISE-S672
Commissioned	4 NwkSKey* 000000000000000000000000000000000000
⊘ Ignored ■ Backends	FCnt Up
Received Frames	FCnt Down*
Reference to the second	6 × Submit

Step 8. Create a "network server" gateway. Copy-paste the MAC address from "LoRaWAN radio" > "LoRaWAN Gateway Identifier".

Gateways List	+ Create
Gateways	
Networks IP Dwell	~
MAC Group Description Address [%] Las	st Alive Status

Create new g	gateway								
General									
	IAC * e.g. 0123456789ABCDEF								
G	Group								
TX Ch	nain * 0								
Antenna Gain	(dBi) e.g. 6								
Descri	ption								
Locat	tion *								1.5
			Google				С. П.	oscow	
		Unit Kinga		can't load Goog	le Maps correc	ctly.		ОСКВА	
		Ireland	Do you own	this website?		ОК			
			Belgiu	Germany	rague	500			
	only For developmen		Paris Gor de	evelopment pu			eloptitent pur		
			France		Hungary	Romania	iva		
				c	roatia Serbia				K 😤
		Portugal Madrid	Barcelona	©Rc	me	Bulgaria		Georgi	Azerbaija
	÷ -	Spain			Gr	eece	Turke		
	Coogle	and a second	_	and a	6 J	Мар	data ©2019 God	ogle, INEGI, ORION	ME Terms of Us
Alti	itude								
	2 Submit								
					1				
Navigation Router									
Router	Model Name	WISE-6610-N100-	A						
Router	Model Name Radio Enable	WISE-6610-N100-2	A			7			
Router LoRaWAN Radio • Packet Forward • LoRaWAN Status Network Server									
Router LoRaWAN Radio • Packet Forward • LoRaWAN Status	Radio Enable	On 902700 903400		Padia Salast		/			
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz)	On 902700		Radio Select Radio 0					
Router LoRaWAN Radio • Lacket Forward • LoRaWAN Status Network Server MQTT Application Server	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz)	On 902700 903400 Enable	T			7			
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTT Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 02	On 902700 903400 Enable On On	• • • • • • • • • • • • • • • • • • •	Radio 0 Radio 0 Radio 0		7			
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTT Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 02 Channel 03	On 902700 903400 Enable On On	T	Radio 0 Radio 0 Radio 0 Radio 0		7			
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTT Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 02 Channel 03 Channel 04	On 902700 903400 Enable On On On On On On	• • • • • • • • • • • • • • • • • • •	Radio 0 Radio 0 Radio 0 Radio 0 Radio 1		7			
Router LoRaWAN Radio • Packet Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 02 Channel 03 Channel 04 Channel 05	On 902700 903400 Enable On On On On On	• •	Radio 0 Radio 0 Radio 0 Radio 0 Radio 1 Radio 1		7			
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTT Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 02 Channel 03 Channel 04	On 902700 903400 Enable On On On On On On	• •	Radio 0 Radio 0 Radio 0 Radio 0 Radio 1		7			
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 01 Channel 02 Channel 03 Channel 04 Channel 05 Channel 06 Channel 07	On 902700 903400 Enable On	T T	Radio 0 Radio 0 Radio 0 Radio 0 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 5elect		7			
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 02 Channel 03 Channel 04 Channel 05 Channel 06	On 902700 903400 Enable On	· · · · · · · · · · · · · · · · · · ·	Radio 0 Radio 0 Radio 0 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1		7			
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 01 Channel 02 Channel 03 Channel 04 Channel 05 Channel 06 Channel 07	On 902700 903400 Enable On On On On On On On On On Enable On	T T	Radio 0 Radio 0 Radio 0 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 2 Radio 3		7			
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 02 Channel 03 Channel 04 Channel 05 Channel 06 Channel 07 Channel STD Channel FSK	On 902700 903400 Enable On On On On On On On On On Enable On Enable On		Radio 0 Radio 0 Radio 0 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 2 Radio 3 Radio 4 Radio 5 Radio 5 Radio 5 Radio 6 Radio 5 Radio 5		7			
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 01 Channel 03 Channel 04 Channel 05 Channel 05 Channel 07 Channel STD Channel FSK Quick Setup Quick	On 902700 903400 Enable On On		Radio 0 Radio 0 Radio 0 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 2 Radio 3 Radio 4 Radio 5 Radio 5 Radio 5 Radio 6 Radio 5 Radio 5		7			
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 02 Channel 03 Channel 04 Channel 05 Channel 06 Channel 75K Quick Setup Quick LoRaWAN Gateway Identifier	On 902700 903400 Enable On On		Radio 0 Radio 0 Radio 0 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 2 Radio 3 Radio 4 Radio 5 Radio 5 Radio 5 Radio 6 Radio 5 Radio 5					
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 01 Channel 03 Channel 04 Channel 05 Channel 05 Channel 06 Channel 07 Channel STD Channel FSK Quick Setup Quick I LORAWAN Gateway Identifier	On 902700 903400 Enable On Enable Off AA555A0000000000 I27.0.0.1		Radio 0 Radio 0 Radio 0 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 2 Radio 2 Radio 2 Radio 0 Radio 5 Radio 0 Radio 5 Radio 0 Radio 0 2 Radio 0 Radio 0 Radio 0 Radio 0 Radio 0 Radio 0 Radio 1 Radio 2 Radio 1 Radio 2 Radio 1 Radio 2 Radio 2 Radio 2 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 2 Radio 2 Radi					
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 01 Channel 02 Channel 03 Channel 04 Channel 05 Channel 05 Channel 07 Channel 5TD Channel FSK Quick Setup Quick I LORAWAN Gateway Identifier	On 902700 903400 Enable On Apple On Asststance Indress 127.0.0.1	<pre></pre>	Radio 0 Radio 0 Radio 0 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 2 Radio 2 Radio 2 Radio 0 Radio 5 Radio 0					
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 01 Channel 02 Channel 03 Channel 04 Channel 05 Channel 06 Channel 75K Quick Setup Quick I LoRaWAN Gateway Identifier Backup Enable	On 902700 903400 Enable On Apple On Apple Off Setting LoRaWAN R Apple I27.0.0.1 I27.0.0.1 Off		Radio 0 Radio 0 Radio 0 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 2 Radio 2 Radio 2 Radio 0 Radio 5 Radio 0 Radio 5 Radio 0 Radio 0 2 Radio 0 Radio 0 Radio 0 Radio 0 Radio 0 Radio 0 Radio 1 Radio 2 Radio 2 Radio 1 Radio 2 Radio 2 Radio 2 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 2 Radio 2 Radi					
Router LoRaWAN Radio • Dacket Forward • LoRaWAN Status Network Server MQTL Application Server Licenses	Radio Enable Radio 0 Main Frequency(KHz) Radio 1 Main Frequency(KHz) Channel 00 Channel 01 Channel 01 Channel 02 Channel 03 Channel 04 Channel 05 Channel 05 Channel 07 Channel 5TD Channel FSK Quick Setup Quick I LORAWAN Gateway Identifier	On 902700 903400 Enable On Apple On Asststance Indress 127.0.0.1	<pre></pre>	Radio 0 Radio 0 Radio 0 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 2 Radio 2 Radio 2 Radio 0 Radio 5 Radio 0 Radio 5 Radio 0 Radio 0 2 Radio 0 Radio 0 Radio 0 Radio 0 Radio 0 Radio 0 Radio 1 Radio 2 Radio 2 Radio 1 Radio 2 Radio 2 Radio 2 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 1 Radio 2 Radio 2 Radi					

Results:

1. Click "application server" > "status". Here shows the end nodes if packets are received by gateway from an end node.

D\ANTECI	Ena	bling ar	n Intellige	ent Planet				
Navigation				LoRaWAN Ga	iteway	Settin	gs	
Router				Application	Server	Statu	S	
LoRaWAN Radio	MQTT Status : Co Node number : 2	nnected						
Network Server				Advantech I	oRaW/	N No	de	
MQTT	Index DevAddr	Description	Model	Received	Fcnt	Rssi	Action	
1 Application Server • Settings	1 0164ECA1		WISE4610-614	2019-06-04T15:52:58Z	44	-28	Delete	Detail 3
2 Status	2 FF389587		WISE4610-614	2019-06-04T16:15:20Z	205	-31	Delete	Detail
<u> Modbus Mapping Table</u> <u> Pavload Engine</u> <u> Licenses</u>	Refresh		Clear log	nodes which	succ	<i>Čes</i>	sfully send d	ata to GW.
Return to Router								

 Received frames page shows the received results. The "FCnt" shows the frame sequence. If this sequence is in-continuously, means some of the packets were lost, did not received.

S LoRaWAN Gateway	×	Server Admin	×	+	ACCRET OF A	NAMES OF TAXABLE PARTY.				_
	安全 192	.168.1.1:8080/admin	#/rxframes/list							
Server Admin										
A Infrastructure	>	Dereit								
🗞 Devices	>	Receiv	ed ⊢rar	nes						
Backends	>	Receive	d	Application	DevAddr	MAC	U/L RSSI	U/L SNR	FCnt	Confirm
Received Frames		2019-06-11	T11:32:06Z	WISE6610_Handler	FF19D12F	AA555A0000000000	-69	9	211	1
Transmission Frames		2019-06-11	T11:32:04Z	WISE6610_Handler	FF19D12F	AA555A000000000	-67	6.5	210	1
		2019-06-11	T11:31:53Z	WISE6610_Handler	FF19D12F	AA555A0000000000	-65	5.2	209	1
							74	7.0	004	
		2019-06-11	T11:30:38Z	WISE6610_Handler	FF19D12F	AA555A000000000	-71	7.2	204	