LX GateWay



GJD12OO LoRa® LX GateWay 868 MHz

Installation Guide

Package Contents

- 1x LX GateWay
- 1x Installation Guide

Power Connection

The LoRa Gateway requires either a PoE supply or 12 – 24 V AC or DC, 1 Amp @ 12V DC. The PoE supply is via the RJ45 socket which is also used for the IP connectivity.

Ensure either the POE or PSU switch is turned on

After the power has been connected wait for 3 minutes before connecting to the Gateway using the IP interface.

Connecting Using IP Interface

- Type 192.168.0.99 into the top search bar of your internet search engine.
- Create your user account

Please Create A User Account

Email address*
Enter Email
Name*
Enter Full Name
Password*
Enter Password
Password confirmation*
Re-enter Password
Enter the same password as above, for verification.



• Select the "System Size" you need and save.

ORA	Gateway				(Q) C) C
ateway	Devices Events Network Lo	gs Upda	te Account	Logout	
LORA	SYSTEM HARDWARE				
	Radio frequency settings				
	System size	Lo	Ra regulations region		
	<100 devices, up to 5km range	• EI	UROPE		
	Channel (change only if interference is suspected	1			
		1.00			

 Now click the "Devices" tab at the top of the screen and turn "Allow new devices" to ON. Learn your selected LoRa devices onto the gateway by simply pressing the learn button on each device, you will see them appear on the page as it syncs with them.

LONA	Gutem	чу									10	Team Breitige Deer
Gateway	Devices	Events	Network	Logs	Update	Account	Logout					
Allow n	ew devices:	Off	On									
Name						Ţ	/pe	Signal	Battery	Status		

12612

When all of the LoRa devices are learnt on turn "Allow new devices" to OFF

LORA Gateway												୲ୢୖଡ଼୲୰
Gateway	Devices	Events	Network	Logs	Update	Account	Logout					
Allow n	ew devices:	on 🕕	D On									
Name						Ţ	pe	Signal	Battery	Status		

- Now click the "Events" tab, this is where all the connected devices are interconnected and mapped to each other.
- You will see this

LORA Gatewa	/	@ <u>615</u>
Galaway Davicas	Eventer Nerwork Logic Update Account Logical	
* GJD Flow		- Depay - E
O, Idlam minifant	Flow t	i info i 🔒 🔒 🕸
~ GJD Functions		9. Dyards tore · ·
ButDigital Output		 Flows Flows Hardware
Sul Charten		Global Configuration Nodes
See Charles		
Del Tipestor (rack		
tver		
~ GJD Gataway		
equal-		
10 digital + maral		🔁 Flow 1 💦
Contention of the test		"nw "9008d40160fs7pd"
~ GJD IP		
Canus IP		
P Elena Eyéne P		
🖈 D-DECLET		
E In Anything		C (#) You can remove the selected nucles or
- GJD LoRa		links with delete
A 0- (EQ)	a. (j= = +)	

• Select your chosen device from the list on the left and drag it onto the mapping section.

LORA Gateway		103012
Galamay Davicas Ervenis Network Logs Updata Account Logout		
GJD Flow		- Deploy -
9.flærndak Røvt + -	i info	i # h 0 -
Trinslay	*	G. Search forces
	 → El Flaw1 	
< GUG Gateway	> Subfoord	
100 COM-	2 Global Corrig	
de D.TECTLuña		
15 unor		
× 630 P		
Canada P		
O Cores		
A Contraction of the Contraction	D-TECT L	oRe e o
California (California)	Type	discilora
< GD Lofa		showmen -
S Late		
B Clinick		
Chona		
Passoul -		D ×
Tranter 1	ctrl cl	Los In the workspace to
(p) Stealor	open t	he quick-edd dialog

• We have selected a D-Tect LoRa for this example, now select the device you want the detector to trigger and drag it from the left side on to the mapping area, we have chosen a Clarius Hybrid for this example.

LORA Gatewa	Y			6000
Gateway Devices	Events Network Logs Update Account Logout			
C GJD Flow			- Deploy	- =
Q filter nodes	Flow 1 + -	i info	i 🔗	ŵ 0 -
Threshold Event		 Flows 	Q. Search flows	*
- GJD Gateway		> E Flow 1		
i digital -	Canus Hybrid IP	> Global Configu	ration Nodes	
(i) digital - input	A D-TECT LORA			
Gatoway tamper				
 GJD IP 				
Clarius IP				
Clarius Hybrid IP				
D - TECT IP		Clarius H	ybrid IP	# 0
IP Anything		Node	7bceb495186a74	e4"
GJD LoRa		Type	cianus-hybrid-ip	show more +
A D - TECT				
IO Module				
IO Module Group				
Photocell				C ×
Speaker		Hold down	g when you cl: select all of its c	tck on a
Speaker			nodes	ion in rootlong
- Cathy				

 Now drag the control interface from the left side on to the mapping area, this interacts between the detector and illuminator.

Gateway Davicas Events Network Logs Update Account Logout	
C GJD Flow	- Deploy -
9. filter nodes Flow 1 + -	i info 🧾 🖉 🕸 🗢 👻
 GJD Functions 	Q. Search flows 🔹
Set Depart	Flows Flow 1 Subflows
	 Global Configuration Nodes
N Set Clarkus A D-TECT LoRa Set Clarkus Hybrid Visible Clarkus Hybrid IP	
tes Sponker	
C Threadout P	
 GJD Gateway 	
dgata- opput	
() digital - Natural	Clarius Hybrid IP
(C) Gateway	Node "7bceb495186e74e4"
- Annor	Type clarius-hybrid-ip
✓ GJD IP	show more
Canus P 🖉	
Caritas Hyorid IP	
ret PAnning n	<i>C</i> ×
 GJD LoRa 	Dragging a node onto a wire will splice
* D.TECT	in trans title 10.00
A V Q	

(0:01)

(0,01)

 Click on the D-Tect LoRa node and select the device you want to use from the dropdown tab. You can set the Lux and Temp thresholds later if needed. Save the settings. It is advisable to name the device to include the unique id number.

Gateway Devices Events Network L	.ogs Update Account Logou	ıt						
¢ GJD Flow							- Deploy 👻	Ξ
Q filter nodes Flow 1					+ -	i info	i # #	0 -
GJD Functions					•		Q. Search flows	-
Set Digital Output						 Flows Flow 1 Subflows Global Configu 	ration Nodes	
Set Clarius Hybrid	LoRa	Sarius Hybrid Visible	Clarius Hybrid IP					
Track								
~ GJD Gateway								
digital - output								
🔞 digital - input						Clarius Hy	ybrid IP	R 0.
Gateway						Node	7bceb495186a74e4	
- tampor						Туре с	clarius-hybrid-ip	
~ GJD IP								snow more -
Clarius IP								
Clasius Hybrid IP								
G D - TECT IP								
P Anything								2 ×
~ GJD LoRa						trayging a ni	it into the link	n shuge
					,* () = 0 +			

• Now do the same for the hybrid, you will need to enter the user/password info for your device and then click the refresh button and select your device from the drop-down box and save the settings. It is advisable to name the device to include the unique IP address.

LORA Gateway

Gateway Devices Events Network Logs Update Account Logout		
C GJD Flow		🗝 Deploy 👻 🚍
Q filter nodes Flow 1	Edit Clarius Hybrid IP node	i info i 🖉 🕸 🔍 👻
 GJD Functions 	Delete Cancel Done	Q. Search flows 💌
Set Data	O Properties	Flows Subflows
Ser Carus)	Identification	> Global Configuration Nodes
P Set Centus - Carus Hybrid Visible O Clanus Hybrid Visible O Clanus Hybrid	Id IP Device Choose device V Refresh	
set Speaker	Name Name	
Threshold	Host/IP	
	Port 80	
✓ GJD Gateway	MAC	
10 dq2a-	and the second s	
COLORI	Pairing	Claring Hybrid IP
	Username	
16 Getway	Password Password	Type clarius-hybrid-ip
< GJD IP	Temporature limit Low 5 °C High 35 °C Hysteresis 2	sław more 🔻
Carbs IP	°C	
Carnes B	Low light Level 10 lux Hysteristis 1 lux	
D-TECTIP ()		
Ceet IP Anything p	Default On Settings	Bold down 3 when you click on a
√ GJD LoRa	Settings used to switch on the light if a true payload is received without a lonic or parameters to specify the mode, duration and nower	node to also select all of its connected
	Mode Visible v	nodes
A DEILON	O Excellent	



- Connect the nodes together by clicking and dragging a connection on to the node points, **press Deploy** and the blue circles disappear indicating the connection is successful, give the system a minute to calibrate and then trigger the detector.
- You see that a status node will indicate what the devices are doing.

LORA Gateway



• This screen shot gives an idea of what an installation may look like.



• This shows some configurations/testing we have successfully carried out with the LoRa gateway. The wireless range test was successful over 6 miles in a suburban environment.

6000

Summary

The pairing principle is the same for all the devices and gateways relays, the device that's sending the alarm trigger goes on the left of the screen and the device that's receiving/processing the trigger goes on the right with the relevant control nodes in between. With the available N/O N/C relays and the ability to use URLs 1000s of integration situations are possible via IP, analogue, or both over long distances meaning installation and labour time and costs are massively reduced.

Gateway Relay Outputs

The Gateway has 4 individually controlled SPST relay outputs each rated at 50mA 24V DC

Gateway Digital Inputs

The Gateway has 2 individual digital inputs.

RESET

There are 3 modes of reset.

Press and hold the reset button up to 2.5 seconds - re boots the Gateway

Press and hold the reset button from 2.5 seconds up to 7.5 seconds – factory reset (clears password, devices, events and logs)

Press and hold the reset button from 7.5 seconds up to 15 seconds – factory reset and network reset

Press and hold the reset button for more than 15 seconds will not cause any reset.

SIMPLIFIED EU DECLARATION OF CONFORMITY

Hereby, GJD Manufacturing Ltd declares that the radio equipment type GJD1200 LoRa LX GateWay 868 MHz is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at gjd.co.uk



ENGINEER NOTES

w: www.gjd.co.uk **t**: +44 (0) 1706 363 998 **e**: sales@gjd.co.uk Unit 2, Birch Business Park, Whittle Lane, Heywood, Greater Manchester, OL10 2SX, UK