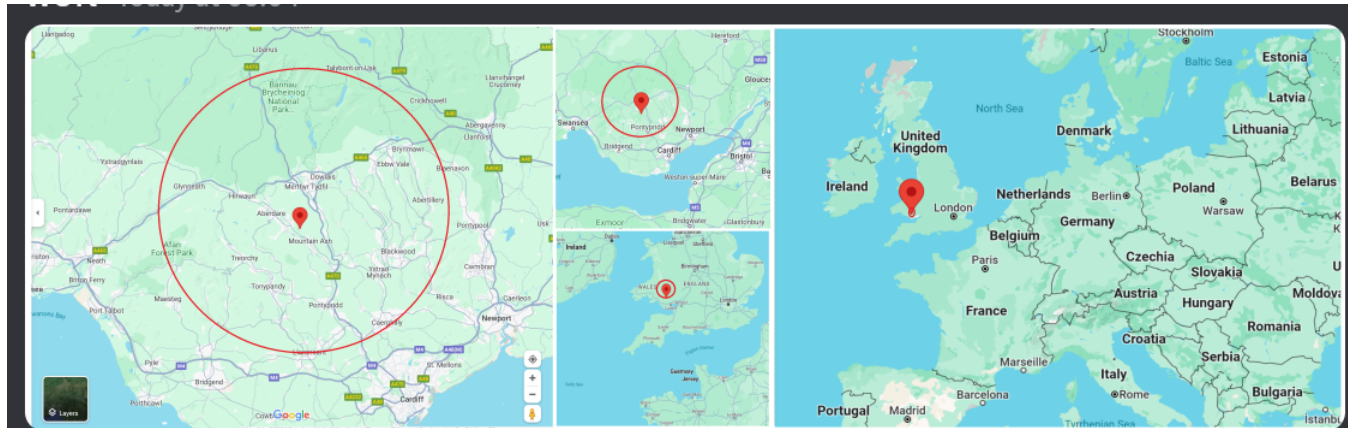


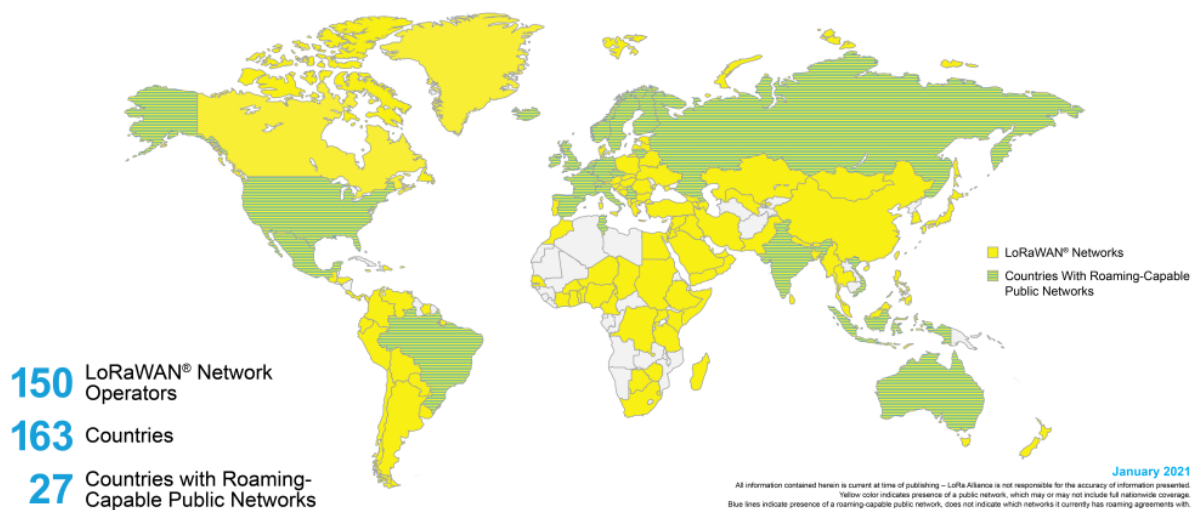
# Problem and Solution? ###

## Problem and Solution?



20km from me as a radius - in perspective wales/uk/europe - and ca be seen above as ww

## Availability of LoRaWAN® Networks and Roaming Capability

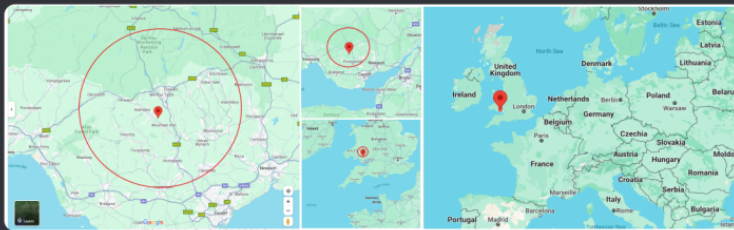
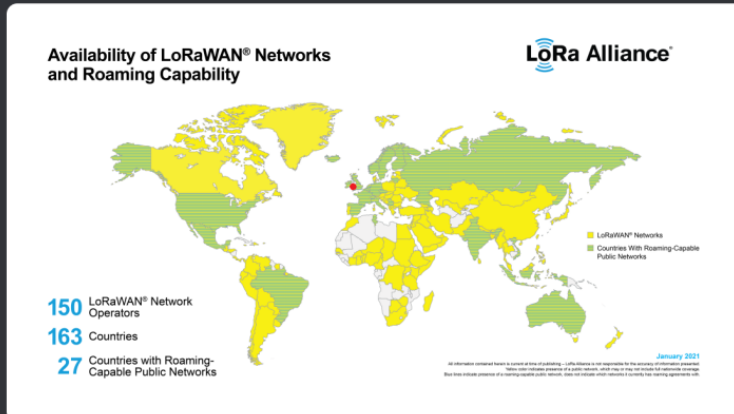




wofl Today at 04:35

i had a thunk and an idea brewed:

- shipping/connections across russia to alaska and down to USA u likely reliable or regular, so:
- need uplink/downlink each side of atlantic to interwebs - why not make each end a proper gateway?
- i.e. an 8 channel LoRaWAN Gateway each end that interfaces with internet connection to squirt the recieved /to be transatlantic data across the internet connection in a scheduled dump every-so-often



20km from me as a radius - in perspective wales/uk/europe - and as above

04:36

for ref there's my 20km radius in perspective of visible, wales, uk and europe and ofc above as mentioned ww

mitch is near dead level horizontal across atlantic from me in USA

- mini-pci-e to pci-express card;
- recieve antenna
- amplifiers
- usb power adaptor
- wire for power adaptor
- usb cable for power adaptor to computer usb power
- 30awg wire for usb adaptor to amps
- coax connectors for amps
- ethernet for router to computer

all only £30 aliexpress w/sipping free!

+ £78 for mini-pcie card that is teh actual gateway

all software free

i has a computron to be 'server'



total £108

all indoor, no drilling or anything just 5mins with a solder iron basic stick ready tinned wire in ready tinned hole and blip!

wow - this actually really is realsitic - even for wofl!

###



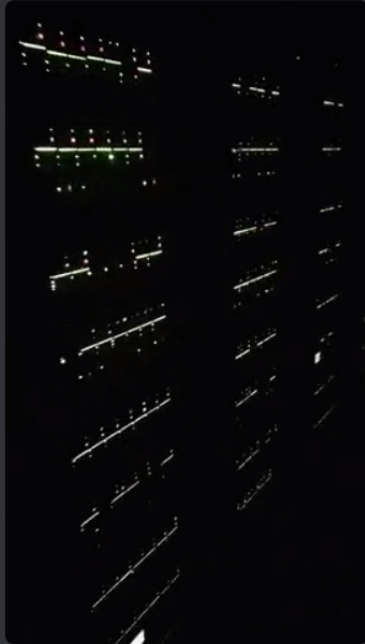
wofl Today at 04:43

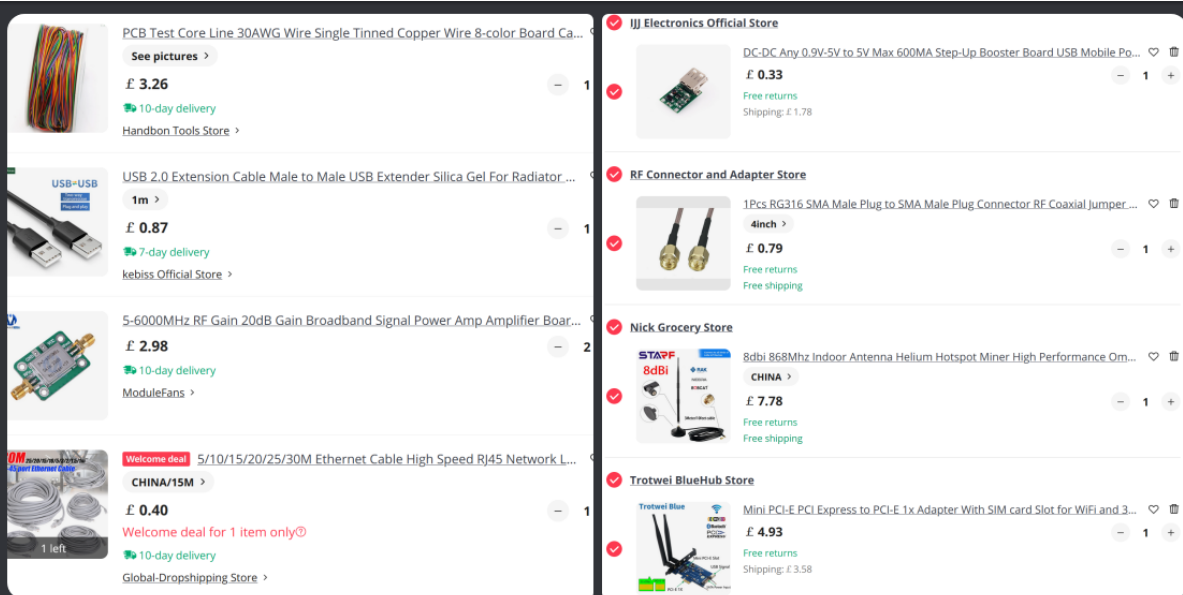
IT'S THE GOoGLE DATA CENTRE OF LoRaWAN for about £100



one each side of atlantic!

[...and yis, is now near 5am and i been charging along in my head full of heroin and methylphenidate for about 4hrs to come up with this 🦴 ] (edited)





in theory this assembles to produce:

- 2.4GHz 2core i7 16gB RAM basic pc running [?] Debian (*got*)
- containing pco-express card adaptor for mini-pcie LRWCCx-MPCI LoRaWAN concentrator gateway (£78)
- above has connectors for antennas - these will be fitted with amplifiers (£4) powered by 5v dc from usb adaptors powered off a pc USB A port (£4) [even remembered 30awg wire for the amp-to-usb power adaptor boards] (£2)
- pc has built in ethernet which will connect to router by a 15m ethernet cable, rj45 both ends (£4)
- one antenna is a 20dB gain mag-base outdoor capable decent power job that can push signal to ful 100mW 20km+ if need be (£15)
- all HAL Driver/Packet forwarder/etc. linux softwares are free to dl and install instructions for debian are even avail with screenshots! (*free*)
- by my figuring all this lacks is teh software bridge between interwebs/router and LoRaWAN Gateway (*that's us! - well, mitch*)

(edited)

✓ **IJJ Electronics Official Store**



DC-DC Any 0.9V-5V to 5V Max 600MA Step-Up Booster Board USB Mobile Po...  

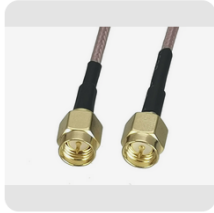
£ 0.33

- 1 +

Free returns

Shipping: £ 1.78

✓ **RF Connector and Adapter Store**



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CHINA >

£ 7.78

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Free shipping

✓ **Trotwei BlueHub Store**




Mini PCI-E PCI Express to PCI-E 1x Adapter With SIM card Slot for WiFi and 3...  



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- 1 +



Free returns


Shipping: £ 3.58


- 



PCB Test Core Line 30AWG Wire Single Tinned Copper Wire 8-color Board Ca...  

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ethernet cable 15 m



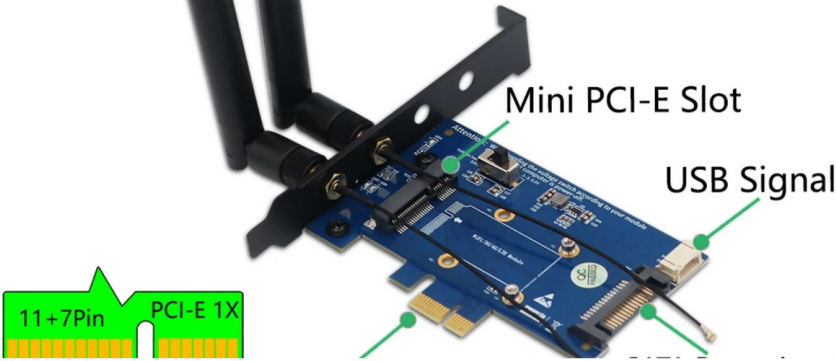





Description

Specifications

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Shipping: free over £ 8.00, otherwise £ 1.63 per order.



1 left

£ 0.40

 1 

Specifications

Package	Yes	Model Number	CPGXDJL
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[ali express shopping list]

(<https://www.aliexpress.com/p/shoppingcart/index.html?spm=a2g0o.detail.0.0.42edWePVWePVjq> "cart

link")

[n|fuse mini-pcie card]

(<https://www.n-fuse.co/devices/LoRaWAN-Concentrator-Card-mini-PCle.html> "n|fuse card")

## Also Required:

An IBM compatible PC running your choice of Linux OS distro (instructions refer to Debian/rasbian):  
at least 485MB of memory and 1500MB of hard disk space to perform a normal installation including

- [Debian Linux OS] (<https://www.debian.org/> "debian")
- {Hal LoRa Picocell Gateway] ([https://github.com/Lora-net/picoGW\\_hal/tree/master](https://github.com/Lora-net/picoGW_hal/tree/master) "gateway drivers")
- [node network setup] (<https://github.com/markqvist/Reticulum:master> "node network")
- [packet forwarder] ([https://github.com/Lora-net/picoGW\\_packet\\_forwarder:master](https://github.com/Lora-net/picoGW_packet_forwarder:master) "packet forwarder")

also possibly of use:

- [check its setup right] (<https://github.com/Lora-net/CTB> "ctb")
- [gateway mco drivers] ([https://github.com/Lora-net/picoGW\\_mcu:master](https://github.com/Lora-net/picoGW_mcu:master) "mcu drivers")

notes to woflself/any:

- [this proj on git] (<https://github.com/orgs/whispr-dev/projects/1/views/1> "this proj's git")
- investigate if 1660ti will fit in the server?