

# Luna USB

## USB LoRa® & LoRaWAN™ long-range low-power radio

### USB Radio with LoRa® P2P and LoRaWAN® Client

- LoRaWAN low-power long-range client
- Single channel LoRa gateway
- LoRa Encrypted Peer-to-Peer (P2P) connectivity
- AT command set



### Product Description

Definium’s Luna USB dongle is a full LoRa solution for adding peer-to-peer or LoRaWAN to any device with USB. Add long-range low-power radio to connect devices together and solve problems that WiFi can’t.

The Luna USB dongle includes a full LoRaWAN 1.0.2 stack (v1.1 coming soon) and can operate in low power mode or continuous receive mode using either LoRaWAN or the built-in peer-to-peer protocol. An AT command set provides an easy and consistent way to configure the module and send data securely.

Luna USB is based on Definium’s Internet of Things sensor plat-

form and is capable of achieving line-of-sight communication up to 25 km or more.

The Luna USB comes with the same AT command set as the Luna DBee, allowing users to start developing software before incorporating the module into their designs.

The Luna USB works out-of-the-box for Windows 10, Linux, and macOS, with drivers available for Windows 7 & 8.

Definium Technologies designs and manufactures its devices in-house in Launceston, Tasmania. Definium produces a broad range of gateways and sensors to use in any IoT network.

### Product Selector

Model	Region	USB	Radios	Interfaces	Enclosure
	AU915, AS923 (Australia / Asia) US915 (United States) EU868 (Europe)	LoRaWAN Client Encrypted Peer-to-Peer Client	LoRa, LoRaWAN, FSK	USB Serial Console Bluetooth	Transparent Plastic
<b>Luna USB</b>	○ ○ ○	● ●	●	● ●	●

Ensure you order the correct product for your LoRaWAN region. ● = Included. ○ = Differs with product variants.

# Luna USB

## Features

Commands	AT Command set
LoRaWAN	Class A & C LoRaWAN 1.0.2 Client Supports adaptive data rate Pre-configured EUI and keys with QR-code
LoRa	Encrypted Peer-to-Peer Client Supports any regional channel and bandwidth combination Supports custom sync word to filter out other networks

## Electrical Data

Power	5 V USB
Input limit	0 V minimum, 6 V maximum
Consumption	Up to 120 mA (transmitting) 3 mA (idle) Below 100 uA (sleeping)

## Enclosure

Transparent Plastic	75 × 25 × 10 mm, 200 g
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Enclosures may vary slightly, contact us for latest info

## Environmental data, quality & reliability

Operating range	-20°C to 60°C
RoHS compliant (lead-free)	

## Security

Secure internal storage of keys	
Radio noise-based random number generator	

## Certifications and approvals

AS/NZS 60950.1:2011, AS/NZS 4268:2012, IEC 60950-1, CENELEC EN 60950-1, 47 CFR 15.247, 47 CFR 15.207, 47 CFR 15.247, 47 CFR 15.215, IDA TS SRD

Non-Australian certifications in-progress

## Support products

DT1046	Nexus 8 LoRaWAN Gateway with CAN, LTE, PoE
LoRaWAN network provision and hosting via partners	

## Further Information

For contact information, see [www.definium.net/contact](http://www.definium.net/contact).

For more product details and ordering information, see the [product data sheet](#).

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