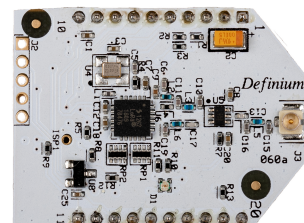


Luna DBee

XBee Format LoRa® & LoRaWAN™ long-range low-power radio

XBee Format with LoRa® P2P and LoRaWAN™ Client

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



Product Description

Definium's Luna DBee module is a Bee-format LoRa® / LoRaWAN® solution for adding encrypted peer-to-peer or client/server radio communications to any device with an XBEE-compatible module slot.

The Luna DBee 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.

The Luna DBee is also available as a solder-down module, suitable

for including in new products. The module comes with the same pin configuration as the Bee-format variant, allowing users to start developing software before incorporating it into their designs.

Luna DBee is based on Definium's Internet of Things sensor platform and is capable of achieving line-of-sight communication up to 25 km or more.

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	Protocols	Radios	Interfaces	Mounting
	AU915, AS923 (Australia / Asia) US915 (United States) EU868 (Europe)	LoRaWAN Client Encrypted Peer-to-Peer Client	LoRa®, LoRaWAN™ FSK	UART Serial Console SPI	Through Hole Surface Mount
DT1060	○ ○ ○	● ●	● ●	● ●	●
DT1060-M	○ ○ ○	● ●	● ●	● ●	●

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

Luna DBee

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	3.3 V
Input limit	3 V minimum, 3.6 V maximum
Consumption	Up to 120 mA (transmitting) 7-12 uA (receiving, low end in newer versions) <3 uA (sleeping)

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.ndefinium.net/contact.

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

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