

# Specification Sheet of BLE to LoRa Communication Device

# Lory®

## BLE to LoRa Communication Device

Lory is a handheld mobile base station that connects to a smartphone with Bluetooth Low Energy (BLE). It allows customers to send and receive text messages using LoRa wireless technology, a low power long distance wireless communication technology.

With this product, communication is possible with other Lory users when there are no mobile services around. When you have Lory and HimalayaTalk app together, you can exchange unlimited messages without extra cost.



### RF Modulation

Bluetooth (BLE4.1) 2.4 GHz is used to pair Lory with your smartphone or other smart devices with Bluetooth modules. It can be used in the shaded areas by utilizing the frequency band of 917 ~ 923 MHz by applying the LoRa® communication method of ISM Band.

### Long Distance Transmission Technology

It is possible to communicate up to 10 km by low power long distance wireless communication modem and supports 3.1 kbps speed.

### Easy

You can download the HimalayaTalk app from the Apple or Google app store for free and use messenger service by pairing your smart device with Lory.

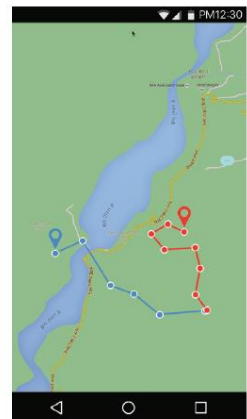
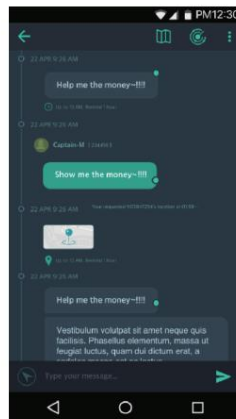
Features

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## Lory-BL1010 Model



## HimalayaTalk®



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## ● Specification

### Communication (LoRa to BLE)

<b>LoRa Frequency</b>	917 ~ 923MHz
<b>Speed</b>	3,100bps
<b>RF output power</b>	Max. 25 mW (+14 dBm)
<b>Sensitivity</b>	down to -148 dBm, 168 dBm max link budget
<b>Modulation</b>	LoRa
<b>Range</b>	Open Area: Max. 10 km City: Max. 2 km
<b>BLE Frequency</b>	2,400 ~ 2,483.5 MHz
<b>Speed</b>	38,400 bps (8N1)
<b>Modulation</b>	Bluetooth 4.1 (BLE)
<b>Range</b>	Max. 10m

### MCU SECTION

<b>Architecture</b>	ARM Cortex-M3
<b>Memory</b>	SRAM 32 KB, Flash 128 KB

### Software

<b>Application</b>	HimalayaTalk® App - ANDROID Support version 4.4 or later - iOS Support version 8.0 or later
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### Hardware

<b>Dimension L x W x H</b>	90 X 45 X 15 mm
<b>Weight</b>	40 g
<b>Charging Port</b>	Micro-USB
<b>Button</b>	Reset Switch 1 EA, Main Switch 1 EA
<b>Storage Temperature</b>	-20 ~ 70 °C
<b>Operation Temperature</b>	-10 ~ 60 °C
<b>Humidity</b>	Max. 90 % R.H
<b>Indicator LED</b>	Operation and Battery Level Indicator
<b>Power Supply</b>	3.7 V, 720 mA Li-Poly Battery

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	Power Consumption: 0.08 W
<b>Charging time</b>	+5 VDC, 1 A Input, Quick Charge 3 Hour
<b>Run Time</b>	Continuous 8 Hours

## Button

Feature	Action	LED	Alarm
Power ON / OFF	Press once for 2 seconds or more	Battery Level	None
Status Check	Press once for less than 2 seconds	Status	Pairing Status
Emergency Alarm	Press 3 times in less than 2 seconds	LED Blink	Continuous Alarm

## Ordering Information

<b>Lory-BL1010</b>	LoRa to Bluetooth(BLE)
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