

# LEO-D31

## 2.9" ePaper Display with Sub-1GHz Communication

**NEW**



### Features

- 2.9" ePaper display with black, white, and red ink
- Sunlight-readable display with 180-degree viewing angle
- Supports data transmissions via Sub-1GHz communication
- Display tags for roaming and location positioning applications
- Cableless design ensures quick installation
- Battery supports operation for 5 years (10 updates per day)
- Equipped with a display fastener for various fixed solutions

### Introduction

LEO-D31 is an ePaper display that represents a new generation of environmentally friendly products. Designed to replace printed paper, the LEO-D31 ePaper display is a low-power information display solution equipped with Sub-1GHz communication that allows the display content to be synchronously updated. The embedded Sub-1GHz protocol offers excellent signal penetration for long-range transmissions and supports roaming for positioning applications. Moreover, with its minimal power consumption, the LEO-D31 ePaper display is ideal for IoT applications, such as factory storage, hospital medicine cabinets, and UD carts.

### Specifications

Display Size	2.9"
Display Area	66.9 x 29.06 mm (2.63 x 1.41 in)
Display Colors	Black, white, and red
Resolution	296 x 128 pixels
DPI	112
Dimensions	92.6 x 45 x 10.3 mm (3.65 x 1.77 x 0.41 in)
Weight	50 g (0.01 lb)
Protocol	Proprietary Sub-1GHz ISM band
Frequency	868 MHz/915 MHz
Power Supply	3 x CR2032 battery
Operating Temperature	0 ~ 40 °C (32 ~ 104 °F)
IP Rating	IP54
Certifications	CE, FCC, NCC, TELEC

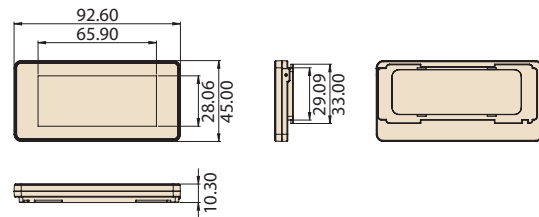
### Ordering Information

Part Number	Display		Communication		Outlook	
	Size	Colors	Frequency	Region	Front/Back	Back
LEO-D31-R0E80	2.9"	Black, white, red	868 MHz	Europe	White/Blue	White
LEO-D31-R0N90	2.9"	Black, white, red	915 MHz	US/Japan/China/Taiwan	White/Blue	White

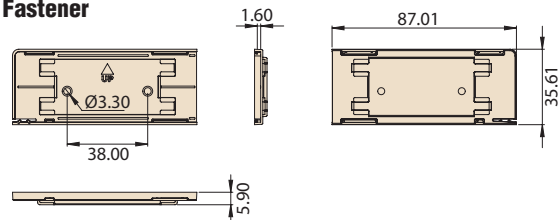
### Dimensions

Unit: mm

#### LEO-D31



#### Fastener



### Sub-GHz Gateway



#### Features

- Interface: Ethernet and wireless
- Protocol: Proprietary Sub-1GHz ISM band
- LED Indicators: Green (power), blue (network), red (error)
- Transmission Range: 100 meters (328 ft) line of sight
- Connection Quantity: 15 Hubs
- Power Supply: DC 5V1A mini USB
- Dimensions: 78 x 68 x 30.3 mm (3.07 x 2.68 x 1.19 in) excluding antenna
- Weight: 84 g (0.185 lb)
- Operating Temperature: 0 ~ 40 °C (32 ~ 104 °F)

### Sub-GHz Hub



#### Features

- Interface: Wireless
- Protocol: Proprietary Sub-1GHz ISM band
- LED Indicators: Green (power), blue (network), red (error)
- Transmission Range: 100 meters (328 ft) line of sight
- Connection Quantity: 1000 display tags
- Power Supply: DC 5V1A mini USB
- Dimensions: 68.5 x 49 x 33 mm (2.7 x 1.93 x 1.3 in) excluding antenna
- Weight: 60 g (0.132 lb)
- Operating Temperature: 0 ~ 40 °C (32 ~ 104 °F)

### Ordering Information

Part Number	Type	Frequency	Region
USM-D62-E80	Gateway	868 MHz	Europe
USM-D62-N90	Gateway	915 MHz	US/Japan/China/Taiwan
USM-D64-E80	Hub	868 MHz	Europe
USM-D64-N90	Hub	915 MHz	US/Japan/China/Taiwan
310TLEOD0001A0	Middleware		

LEO-D Device Manager