

# 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                         |

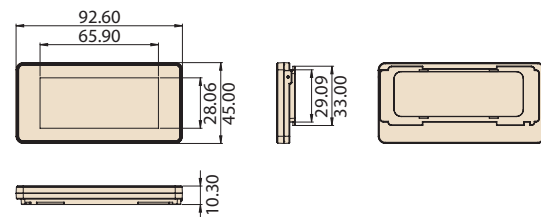
### Ordering Information

| 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 |

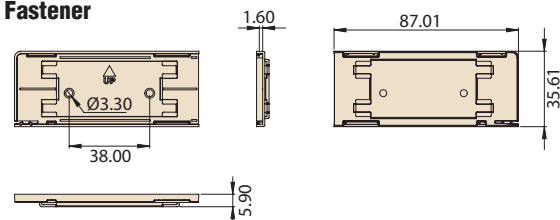
### Dimensions

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