

Adeunis Field Test Device

Swisscom Low Power Network

The LoRaWAN Field Test Device by ADEUNIS RF is a ready to use system which provides connection to the Swisscom LPN using the LoRaWAN V1.0 protocol. It allows to analyze the quality of the nationwide Swisscom LPN.

Equipped with a large LCD screen, you can instantly review all operating parameters of the network (Uplink, Downlink, Spreading Factor, Packet Error Rate ...).

With built-in rechargeable battery, this demonstrator allows for many hours of use and can be recharged with any type of micro USB charger.

Once the Field Test Device is switched on, a Join procedure is automatically triggered. As soon as the Join request has been accepted the device broadcasts a radio frame every two minutes or when Button 1 is pressed.



Performance

Power : up to 25mW
 Radiated RF power : 14dBm
 Sensitivity : -137dBm
 Modulation : LoRa™

Consumption

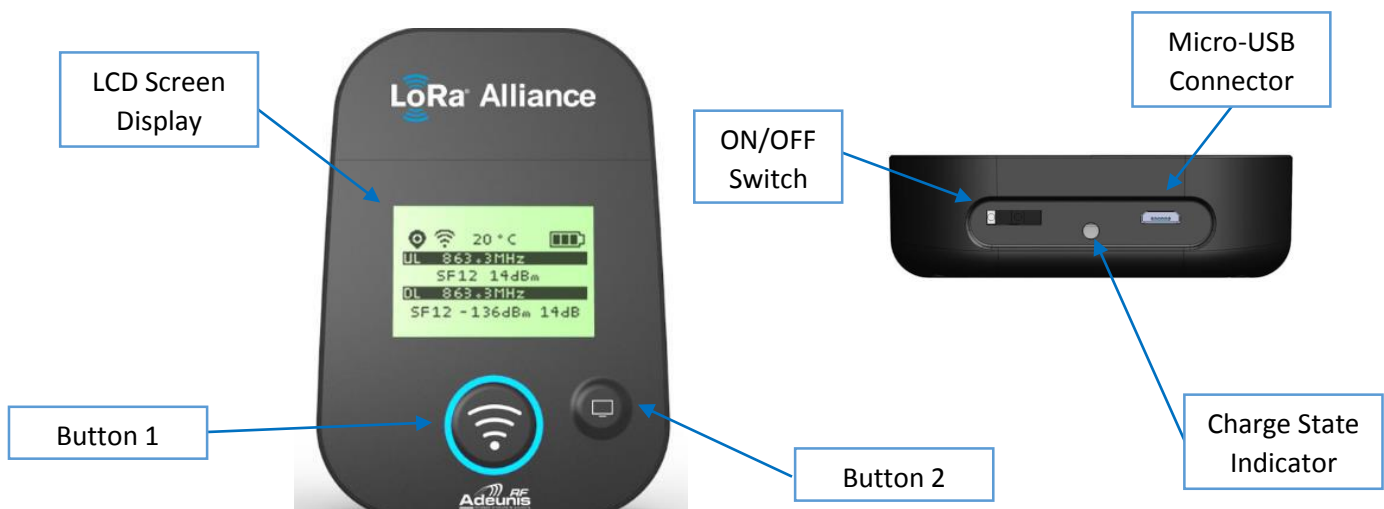
Battery : 2000mAh
 Autonomy: approx. 10 hours

General information

Dimensions : 180x72x21mm
 Weight : 150g
 Operating temperature : -20°C /+75°C
 Certified EN300-220 V2012

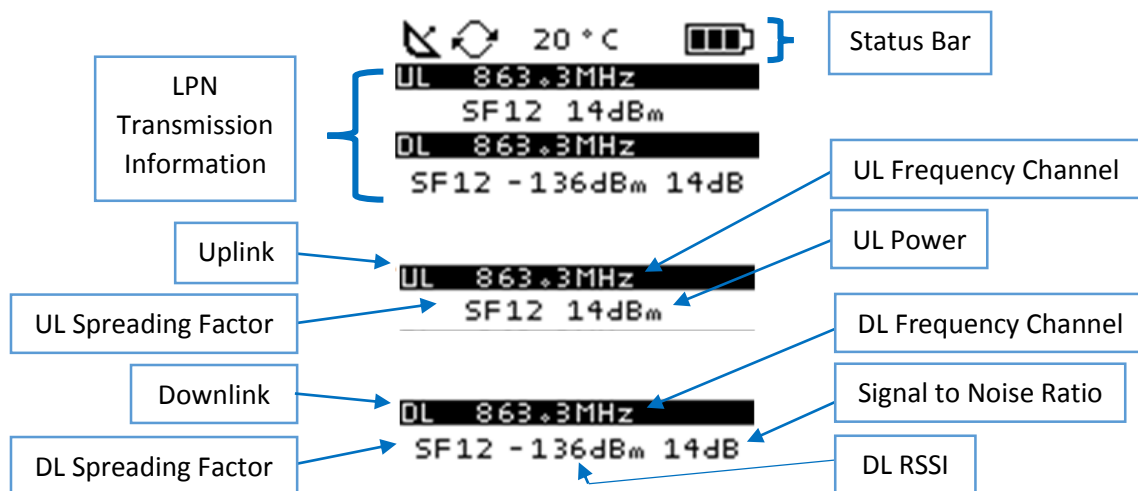
Charging the Field Test Device

The product contains a rechargeable battery. Upon connecting it to a computer via a micro-USB cable, it will automatically begin charging; even if the ON/OFF switch is on the OFF position (this behavior is similar to the one of mobile phones). The product can still be used while it's charging. During the charging process, the charge state indicator is steady red. When charging is completed, the charge state indicator becomes steady green. If the battery is completely discharged, it will need 6 hours of charging time to get back to full charge.



User Interface

| | |
|-------------------------------|---|
| Button 1 | Used to trigger RF transmissions manually |
| Button 2 | 1st push activates LCD backlight if LCD backlight is already activated, pushing Button 2 again changes the LCD display. |
| On/OFF Switch | Turns the device ON or OFF. Slide the button to the right to turn the device ON |
| Charge State Indicator | Indicates the device's state of charge. |
| USB Connector | Can be used to charge or configure the device |
| LCD Screen Display | The embedded LCD screen is divided in three pages: Main screen, GPS screen & PER screen |



| Item | Icon | Description |
|-----------------------|---------|---|
| GPS Status | No Icon | GPS is deactivated |
| | | GPS is not synchronized |
| | | GPS is synchronized |
| | SAT 10 | Number of satellites GPS is tracking |
| | | Indicates positioning accuracy |
| RF Status | No Icon | Product is idle |
| | | Device is trying to join the Swisscom LPN |
| | | Manual transmission has been triggered |
| | | Periodic transmission has been triggered |
| Temperature | 20°C | Temperature in °C |
| Battery Status | | Battery level indicator |



As long as the device is provisioned on the Swisscom LPN Portal it is forbidden to access the firmware of the device. Swisscom is not liable for any failure or misbehavior of the device after manipulation or reconfiguration of the firmware through the micro USB port.