Troubleshooting for Sigfox Communication

This is the troubleshooting for Sigfox communication of Sigfox-ready sensors with FW versions listed below:

No.	Phenomena	Reason	Solutions
1	Node does not send RF to the base station periodically, LED does not blink	• No power supply or battery ran out • The configuration sending cycle is incorrect	• Check that each battery is empty OR not installed correctly • Check the power supply • Check the send cycle configuration
2	Node does not send RF to the base station according to the alarm, LED does not blink	• The alarm threshold values are incorrect and/or disabled alarm function • Running out of the number of alarms set for the day	• Check alarm threshold values and alarm enable • Check the configuration for the maximum number of alarms per day
3	Node does not send RF to the base station when activated by the magnetic switch, LED does not blink	• The magnetic switch has malfunctioned • Or place the Magnet key in not right position	• Locate the correct position for the magnet key • Read the status of the magnetic switch via Modbus (when powering or attaching the battery) to see if the magnetic switch is working.
4	Node has blinked LED when sending RF but the base station cannot receive	• Out of the number of RF packages of uplink per day (max 140 packages/day)	• Check on the base station whether the event message exceeds the number of RF packets
5	Node has sent RF but the LED does not blink	• LED malfunction	• Contact manufacturer
6	The node does not send RF and the RF module is hot	• Insert the battery in the wrong direction • Electronics got problem	• Check battery polarity
7	RSSI is weak and often loses data	• Distance between Node and Base station is far or there are many obstructions • Connection to Antenna problem	• Check the location of the Sigfox node and distance to the base station • Check the antenna connector in the PCB
8	The measurement values from the sensor do not change and keep constant values for a long time	• Sensor got failure • Sensor cable broken • The sensor connector is not connected firmly	• Check sensor cable and connector • If the issue still exists, please contact the manufacturer for a warranty or replace the new sensor

Revision #4
Created Thu, Jun 23, 2022 7:24 PM by Lộc Vĩnh Nguyễn
Updated Wed, Jun 29, 2022 11:42 PM by Lộc Vĩnh Nguyễn