2025/11/29 09:50 1/1 batterycomparison

This page contains comparison of different batteries to be used for Ise01 LoRaWAN Soil Moisture Sensor.

Battery Voltage description: The battery for the lse01 should be between 3.0V to 3.6V. If we need to use a battery less than 3.3 volts we have to remove diode D1 and shortcut the two pads of it.Diode D1 lays between the main circuit and the battery If battery is less than 2.7 volts user have to replace the battery.

Specific power and Specific energy are important factors to keep in mind before choosing a battery.

Specific energy: defines the battery capacity in weight (Wh/kg). The capacity relates to the runtime. **Specific power:** It's the ability to deliver a high current and indicates loading capability.

	Current	Voltage	Cost	Charge cycle	Lifespan	Safety	Specific Energy	Thermal runaway	1
Lithium Thino- Chloride									
Nickle Manganese Cobalt Oxide	mA	3.60V, 3.70V nominal;typical operating range 3.0-4.2V/cell, or higher		1000-2000			150-220Wh/kg	210°C	
Lithium Iron Phosphate		3.20, 3.30V nominal; typical operating range 2.5–3.65V/cell		2000 and higher			90-120Wh/kg	270°C (518°F) Very safe battery even if fully charged	
Lithium Titanate									
Lithium-lon Polymer									

References:

http://wiki.dragino.com/xwiki/bin/view/Main/User%20Manual%20for%20LoRaWAN%20End%20Nodes/LSE01-LoRaWAN%20Soil%20Moisture%20%26%20EC%20Sensor%20User%20Manual/https://owlcation.com/stem/Comparing-6-Lithium-ion-Battery-Types

From:

https://student-wiki.eolab.de/ - HSRW EOLab Students Wiki

Permanent link:

https://student-wiki.eolab.de/doku.php?id=eolab:treemap:batterycomparison&rev=1658489531

Last update: **2023/01/05 14:38**

