

Battery Capacity Note

Battery value is available through API or RTLS Manager.

List of Online Tags

#	Tag Mac	Tag Alias editable	Status	Received blinks	Platform	HW	FW	Battery	Refresh Rate [ms]	TX Power	Sleep Mode	Sleep Threshold	Random dev	Channel	RF profile	Mounted Sensors Click to calibrate	Active Sensors	Dynamic Range
1	00205efe1085	Guard #1	9/19/2017, 09:29:01	1110	TAG Li-ion	4.4	3.115	57%	100	Default	Immediate (high)	N/A	Enabled	01	RF 4	N/A	N/A	N/A

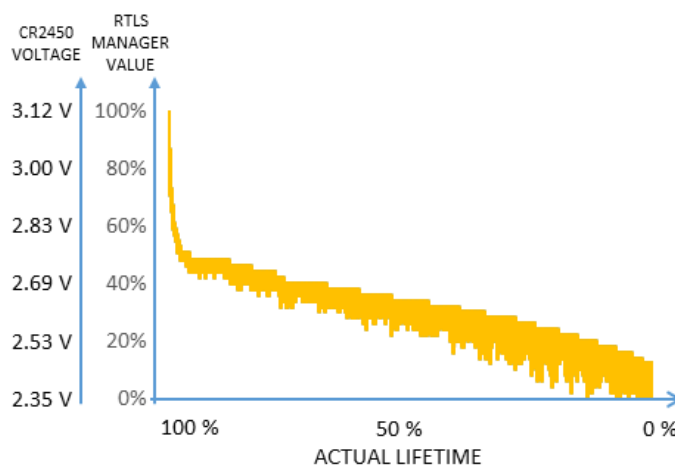
Battery value is given in percentage; however, it is just direct linear calculation of battery voltage. Since battery voltage is not linear to its capacity, one should take it as a very indicative estimation. This simple method is used to keep price of tag as low as possible.

Tag Piccolino

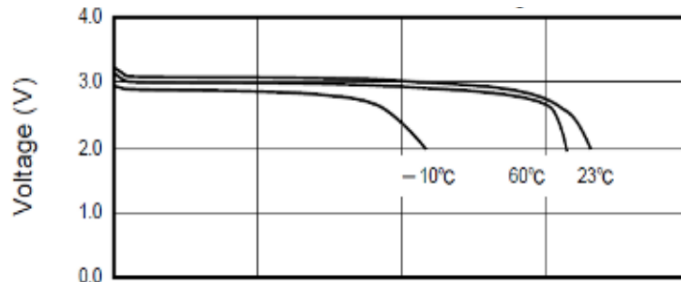
The discharge curve is depicted in picture below. One should notice that even if tag reports capacity around 50% in RTLS Manager it has around 90% real battery capacity. Since coin battery is quite weak power source the more is depleted the higher variation is present in reported value.

Note: From Tag firmware 3.119 the battery value [%] will be linearized, so it will provide more accurate results.

In order to obtain battery lifetime please use Tag Lifetime calculation spreadsheet provided via partner portal.

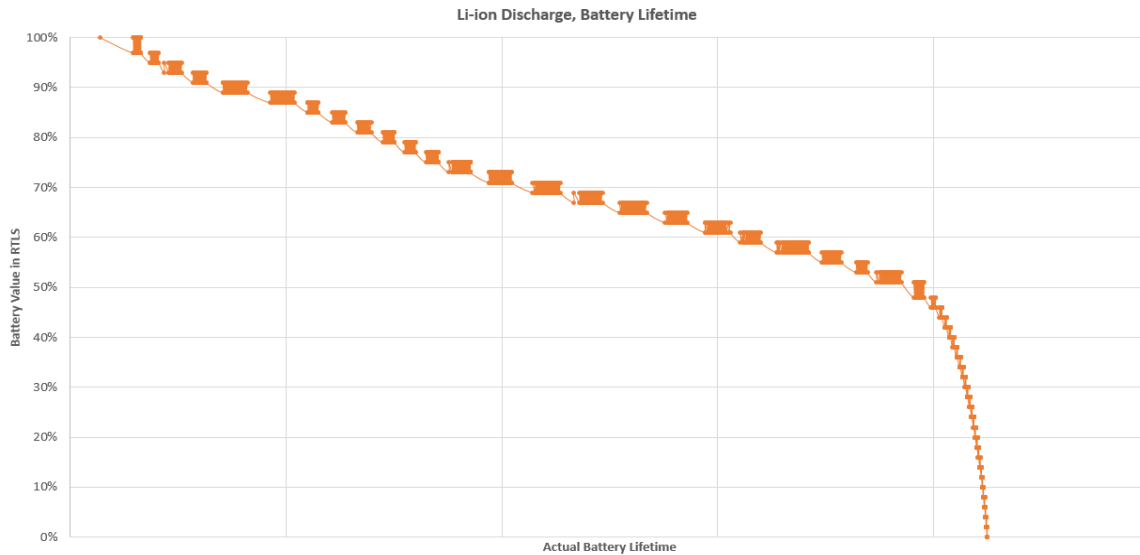


Coin battery related to temperature



Tag IMU / Tag Li-ion (Liion battery, Li-pol battery)

One can see that discharge curve is more linear



Liion discharge profile at low Temperatures

There is one more concern: Li-ion battery's capacity is related to temperature. So, tags which are outside are in temperatures $<0^{\circ}\text{C}$ are affected by this, see graph below.

