Battery Calculator Guide for Dragino Product.

Dragino Battery powered product are all runs in Low Power mode. We have an update battery calculator which are base on the measurement of the real device. User can use this calculator to check the battery life and calculate the battery life if want to use different transmit interval.

Instruction to use as below:

Step 1: Downlink the up-to-date DRAGINO_Battery_Life_Prediction_Table.xlsx from:
https://www.dragino.com/downloads/index.php?dir=LoRa_End_Node/Battery_Analyze/

Step 2: Open it and choose
  ➢ Product Model
  ➢ Uplink Interval
  ➢ Working Mode
And the Life expectation in difference case will be shown on the right.

How to use:
1.Please do not modify the formula in the table
2.After selecting the product number and model, then select the TDC unit, and finally enter the TDC, you can get the predicted battery life
3.Explanation of abbreviations：WD-->Watchdog   TX-->Transimt   RX-->Receive

Battery Life Calculator

Product	battery capacity(mah)
LDS01____LoRaWAN_Door_Sensor	240
UNIT	TDC (Uplink Interval)
min	20

Work Mode
MOD=1

		Sleep power（mA*ms）	Sampling power（mA*ms）	TX power (mA*ms)	RX1 power（mA*ms）	RX2 power（mA*ms）	Watchdog power（mA*ms）	Average power（mA）	Detect power（mA*s）	Life expectancy（yr）
EU868	DR5_SF7_125K_14dB	8400	427.16444	7367.8544	880.58488	4097.083	757.1706667	0.018268685	0	1.5
	DR4_SF8_125K_14dB	8400	427.16444	13210.2528	950.0943	4097.083	757.1706667	0.023192521	0	1.2
	DR3_SF9_125K_14dB	8400	427.16444	23652.608	1068.0336	4097.083	757.1706667	0.031986736	0	0.8
	DR2_SF10_125K_14dB	8400	427.16444	42244.125	1461.4876	4097.083	757.1706667	0.047792297	0	0.6
	DR1_SF11_125K_14dB	8400	427.16444	94013.4	2230.4828	4097.083	757.1706667	0.091509095	0	0.3
	DR0_SF12_125K_14dB	8400	427.16444	168081	4097.083	4097.083	757.1706667	0.154625338	0	0.2
US915	DR3_SF7_125K_20dB	8400	427.16444	8441.476	681.61989	1587.135	757.1706667	0.016908376	0	1.6
	DR2_SF8_125K_20dB	8400	427.16444	15170.785	913.6491	1587.135	757.1706667	0.022707198	0	1.2
	DR1_SF9_125K_20dB	8400	427.16444	27254.383	941.388	1587.135	757.1706667	0.03279472	0	0.8
	DR0_SF10_125K_20dB	8400	427.16444	48745.32	995.2243	1587.135	757.1706667	0.050735363	0	0.5