



**QUUPPA LITE SERIES  
BATTERY LIFE  
CURVES**  
Quuppa

## **BATTERY LIFECYCLE CURVES DEPENDING ON THE ADVERTISING PERIOD**

### **MEASUREMENT DATA**

The data curves in this document were measured with the following input parameters:

- **Product:** LITE ID Quuppa
- **Version:** v1.1.x
- **Advertising period** of the « Triggered » mode: sweeping from 100ms to 1s
- **Advertising period** of the « Default »: sweeping from 1s to 10s
- **Advertising power** : 0dBm, +4 dBm
- **Long Slee** : Activation/Deactivation of the « Long Sleep » mode
- **State duration** of the « **Triggered** » mode: sweeping from 1s to 5min
- **State duration** of the « **Default** » mode: sweep from 20s to 5min
- **Responde mod** : there are 3 reception parameters: « Power Save », « Balanced » and « Fast ». Select respectively for "Triggered" and "Default" modes.
- **Number of events** : sweeping from 1 to 1000 movement per day
- **Test temperature:** 23°C
- **Battery capacity:** 1 pile CR2032 with 20% derating.

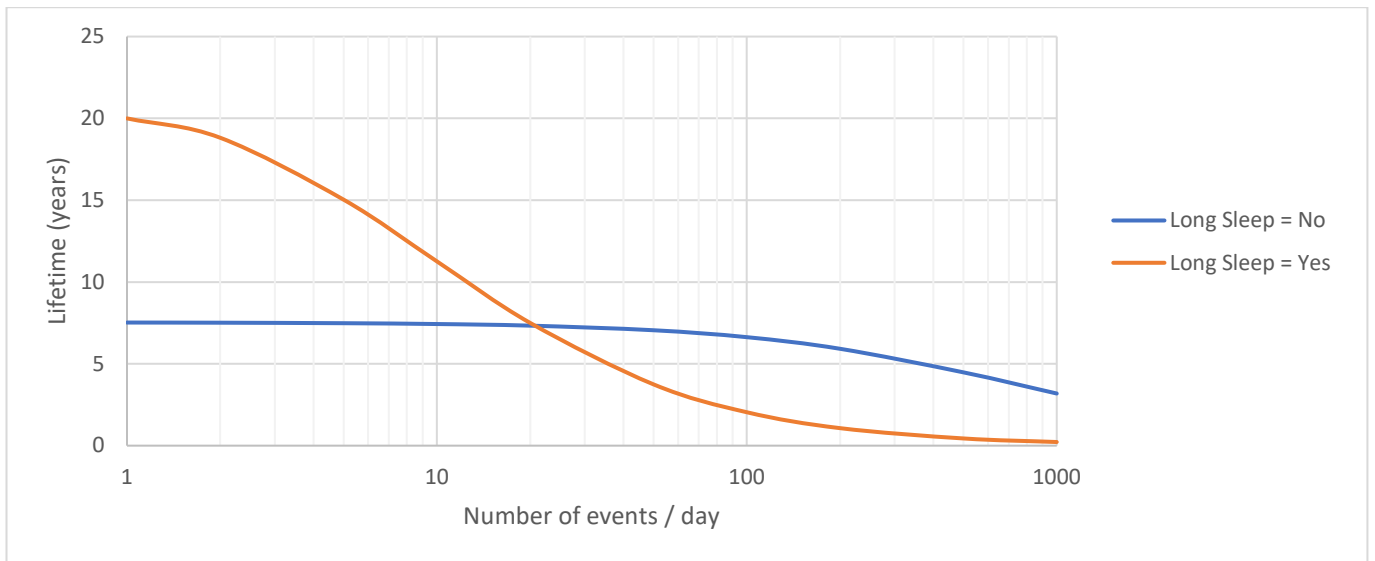
The self-discharge of the battery, and the intrinsic lifetime of its chemical content, limit its use to 20 years, including in storage. The autonomy depends on the temperature of use, it is possible to apply for + 60 ° C an increase of 4% and for -10 ° C a reduction of 24.5% of the battery capacity.

The curves given below are calculated for the use of geopositioning in transmission mode on movements. Potential downlink commands, LED lighting commands, OTAP programming, etc. are not included in this calculation.

## QUUPPA FORMAT

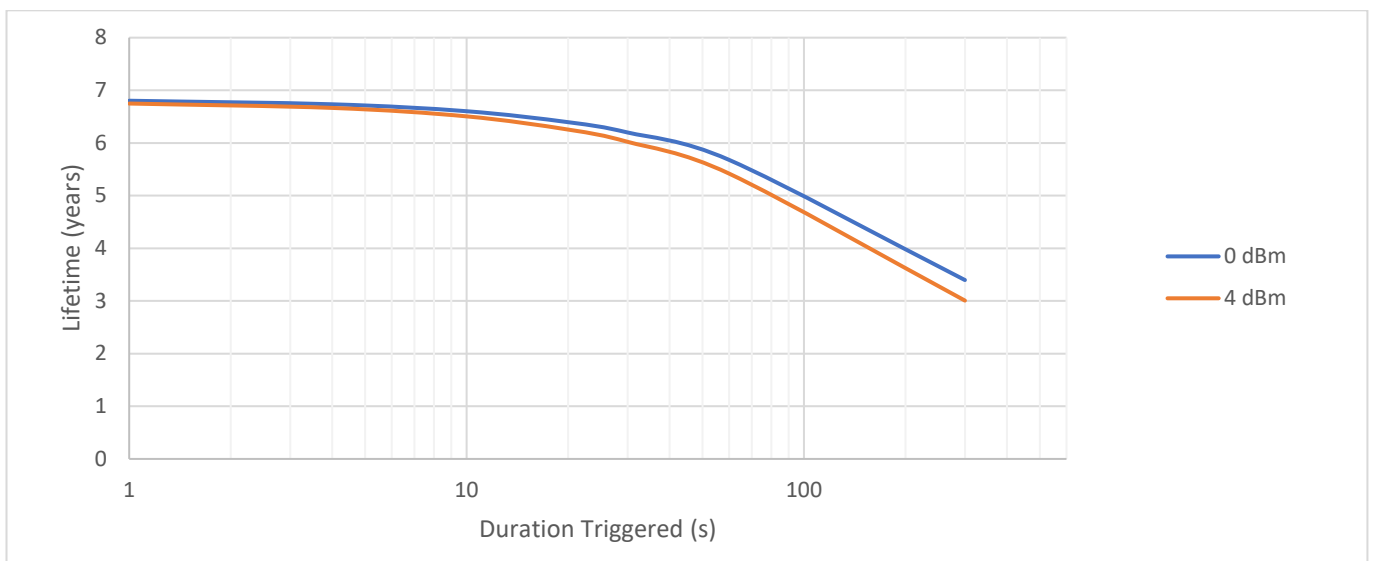
- Lifetime with default parameters, depending on «Long Sleep» activation and number of events per day:

Parameter	Rec. Triggered	Rec. Default	Power	Resp. Triggered	Resp. Default	Duration Triggered	Duration Default
Fixed value	1s	10s	+4 dBm	Power Save	Power Save	20s	60s



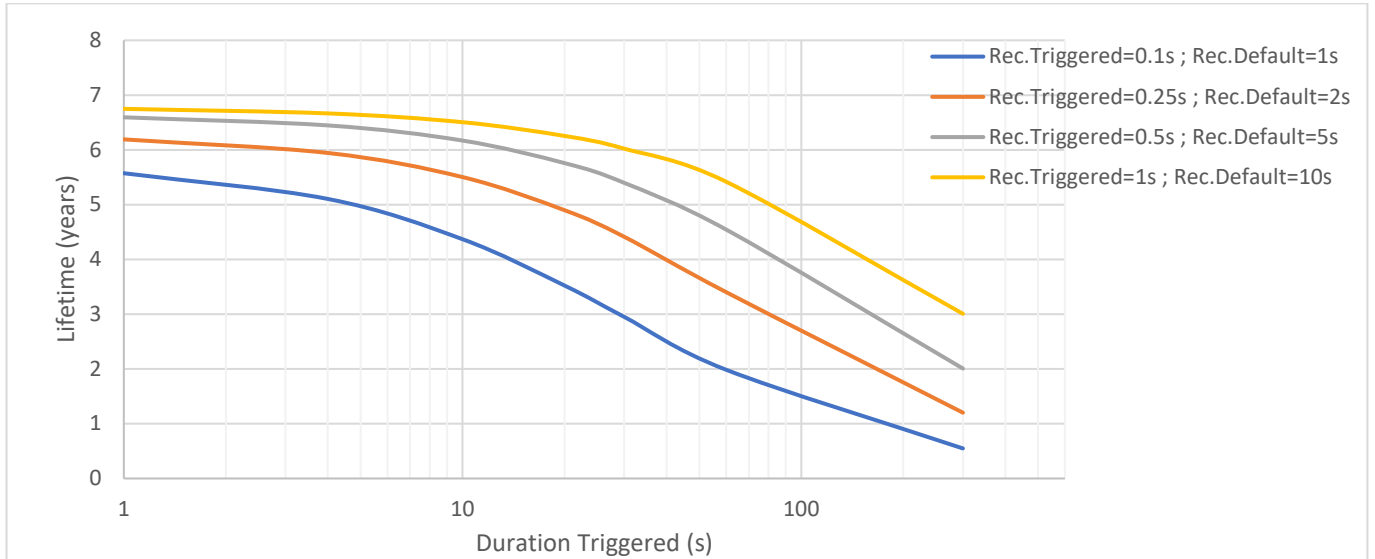
- Lifetime depending on state duration «triggered» and transmit power:

Parameters	Rec. Triggered	Rec. Default	Resp. Triggered	Resp. Default	Long Sleep	Duration Default	Nb evt/day
Fixed value	1s	10s	Power Save	Power Save	No	60s	150



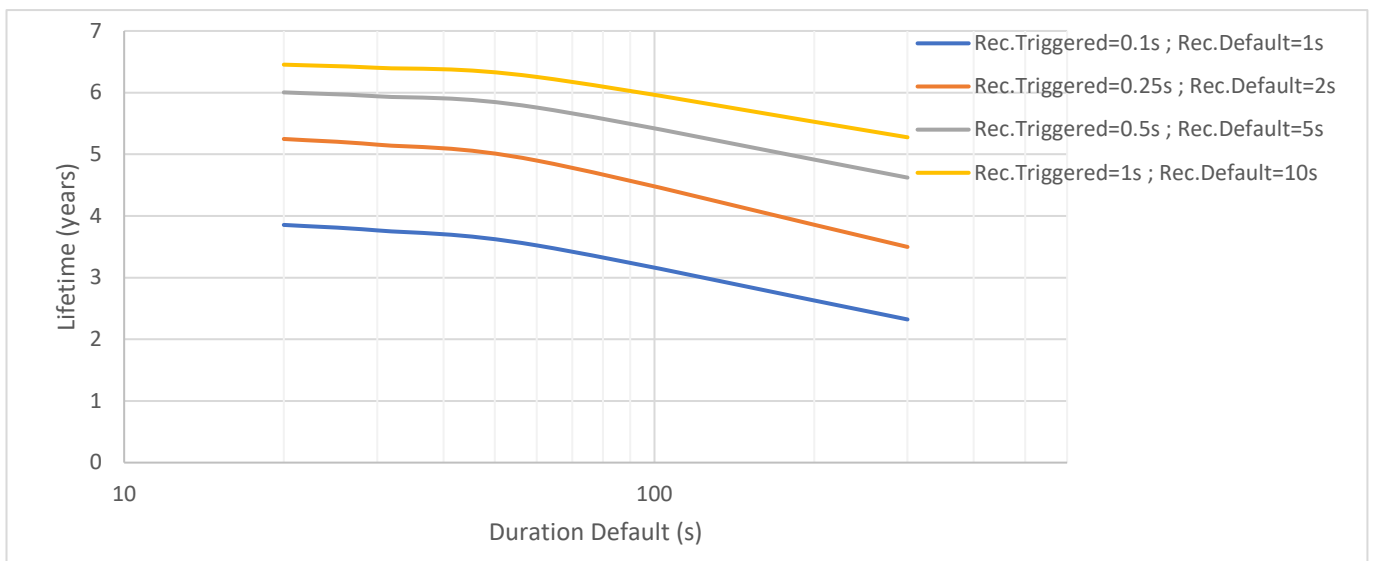
- Lifetime depending on state duration «Triggered» and transmit recurrences in«Triggered /Default»:

Parameter	Power	Resp. Triggered	Resp. Default	Long Sleep	Duration Default	Nb evt/day
Fixed value	+4 dBm	Power Save	Power Save	No	60s	150



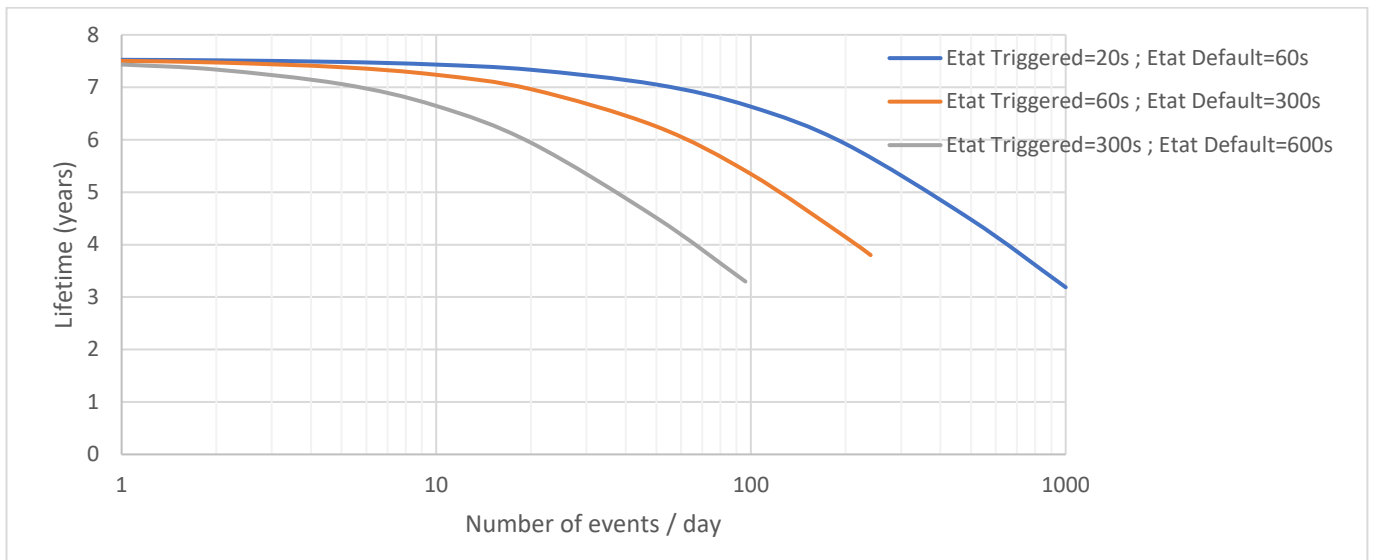
- Lifetime depending on state duration «Default» and transmit recurrences in«Triggered /Default»:

Parameter	Power	Resp. Triggered	Resp. Default	Long Sleep	Duration Triggered	Nb evt/day
Fixed value	+4 dBm	Power Save	Power Save	No	20s	150



- Lifetime depending on states duration«Triggered /Default» and number of events per day:

Parameter	Power	Récur. Triggered	Récur. Default	Resp. Triggered	Resp. Default	Long Sleep
Fixed value	+4 dBm	1s	10s	Power Save	Power Save	No



- Lifetime depending on «Response Mode»:

Parameter	Power	Récur. Triggered	Récur. Default	Long Sleep	Duration Triggered	Duration Default
Fixed value	+4 dBm	0.5s	1s	No	20s	60s

