A DEVICE THAT CAN OPERATE FOR UP TO 2 YEARS WITHOUT CHARGING

The device is capable of meeting not just all standard functions but also more demanding requirements for GPS monitoring. Continuous sending of GPS positions is very demanding on energy levels and influences the endurance of the battery. The TICK GPS tracker enables the user to choose between 5 operational modes, these modes influencing the maximum operation time of the device without the need to recharge. Choose the opimum operational mode for your monitoring and extend the length of time that the battery (of the device) will operate without the need to recharge.

Operating modes

ABM – Activated by Motion

The device switches on GPS at the instant when motion is detected. If the device is not in motion, GPS switches off.

- Locations are registered every 10 sec and sent to the web/mobile applications once a minute.

Time GPS is switched on	Endurance (hours)	Endurance(days
GPS is idle (the device is not in motion)	428	17,8
1 hour motion/23 hours idle	309	12,8
4 hours motion/20 hours idle	169	7,0
6 hours motion/18 hours idle	129	5,4
8 hours motion/16 hours idle	105	4,4
12 hoours motion/12 hours idle	76	3,1
Constantly in motion	42	1,7

Usages: monitoring vehicles, people, parcels, etc.

Pursuit

GPS locations are sent continuously every 5 sec. regardless of whether the vehicle is moving or standing. After 60 minutes the device automatically switches to ABM mode. Mode changes (from ABM to Pursuit) can be set repeatedly.

Motion status	Endurance (hours)
It does not matter if vehicle is moving or standing	8 – 20 (depending on the availability of the GSM signal)

Usages: monitoring moving vehicles. Gives instant information of route and turns off the route.

Standby

The tracker automatically does not monitor locations, seize detection or accelerometer, but is ready to **immediately** accept a signal for switching into a different mode (ABM, Pursuit, Asleep, Periodic wake up) for starting the monitoring process.

Motion status	Endurance (days)
It does not matter if vehicle is moving or standing	21,1

Usages: monitoring children, monitoring bikes (one-off enquiry - where the monitored Asset is).

Asleep

The tracker automatically does not monitor locations, seize detection or the accelerometer, but is able **after a preset** interval to accept signals for switching to a different mode (ABM, Pursuit, etc.).

Pre-set interval for changing mode	Endurance (hours)	Endurance(days
10 minutes	389	16,2
20 minutes	755	31,4
30 minutes	1102	45,9
60 minutes	2039	84,9
90 minutes	2844	118,8
24 hours	10410	433,8

Usages: monitoring bikes, containers, etc. Suitable for lengthened battery life.

Periodic wake up

The tracker wakes up after a pre-set interval, takes GPS location, sends this information and then goes back to sleep.

Period for sending location (device wake up)	Endurance (hours)	Endurance (days)
Every 20 minutes	858	35,7
Every 60 minutes	3417	143,0
Every 12 hours	4769	199,0
Every 24 hours	5760	240,0

Usages: monitoring containers, wagons. An advantage is the significantly lengthened operating time.

Power OFF

This is the recommended mode to use when storing the device. All tracker functions are completely switched off. It is possible to wake up the device and set the required mode during charging of the device.

These values are valid for hardware versions NCL21-2, NCL21E-2 and for firmware versions 540 and higher.
Find out your version on:
www.namsystem.com/tick-activation

Overview of operational modes:

Mode	Activated by Motion (ABM)	Pursuit	Standby	Asleep	Periodic wake up	Power OFF
Active GSM	✔	✔	✔	Acc. to interval	Acc. to interval	✖
Active GPRS	✔ In motion/idle ✖	✔	✖	✖	Acc. to interval	✖
Active GPS	✔	✔	✖	✖	Acc. to interval	✖
Seize detection	✔	✔	✖	✖	✖	✖
Montion sensor active	✔	✔	✖	✖	✖	✖
Device endurance	1,7 – 17,8 days	8 – 20 hours	21,1 days	16,2 – 433,8 days	35,7 – 240 days	–

During charging on a (switched on) charging mat, the tracker is always constantly logged on to GSM. This means it is possible to switch to another operational mode at any time.