GUARDING MATERIALS, MACHINERY AND EQUIPMENT ON CONSTRUCTION SITES

TICK – A GPS TRACKER FOR PROTECTING PROPERTY

NAM SYSTEM®
MONITORING TECHNOLOGY

PROTECT AGAINST REPEATED THEFT – GUARD ANYTHING, ANYTIME AND FROM ANYWHERE

TICK is a portable GPS tracker with long battery life that can be used anywhere where there is a GSM signal available. Whether it is large construction sites, private homes under construction or community projects (laying pavements, building roads or motorways), a use for TICK can be found everywhere.

Thanks to its magnetized mounting and also because of its small dimensions, TICK can be placed almost anywhere. Monitoring can be set up very quickly in the mobile application. Just choose how you want your property to be guarded.

Regular thefts do not only cause financial losses but also delays in work which may endanger contract deadlines

Thefts most commonly occur during the evening and on weekends when most construction workers are not on the site or at times when employees take work-breaks. It is often not possible for workers to take tools and equipment with them during a break. Commonly, several firms and their employees work on a construction site making it difficult to guard property and equipment. Thieves do not waste any time – expensive building equipment is stolen and sold off elsewhere. Materials are taken onto other sites.

THEFT OF MATERIALS FROM CONSTRUCTION SITES

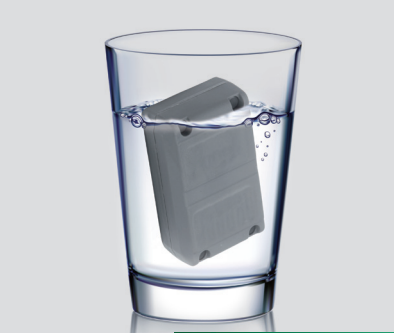
THEFT OF PROPERTY FROM PORTABLE CABINS AND FROM LOCKERS

THEFT OF CONSTRUCTION MACHINERY AND EQUIPMENT

REASONS FOR USING THE TICK GPS DEVICE

- **It can be used to monitor various objects according to current needs – it is portable**
- **Simple operation using the mobile application**
- **No installation is needed. It is durable and resistant to dirt and dust**
- **Notifications are received immediately when the tracker moves – this warns that someone is stealing**
- **If the tracker is fixed (by magnets) or put onto monitored property, you can see where it is**
- **Battery life is up to 8 months without charging**
- **Excellent GPS sensitivity for locating even when the tracker is on the vehicle underside**
- **The device includes a SIM – it is ready to operate. There is no need to buy anything else**

Automatic location sending. Don´t pay for needless SMS messages



Waterproof. Also works under water

Wireless charging. No damaging of connectors

HOW TO USE THE GPS TRACKER

Buildings under construction and construction sites are heaven for a thief. They survey the site beforehand, then return to the site later (in their vehicle) and steal anything that they can find. Pallets stacked with bricks, scaffolding frames, wheelbarrows, cement mixers, hand tools, power tools and basically any items that can be sold quickly regularly disappear from sites. Some sites are guarded by security agencies. Even so, it often happens that the guard/watchman is on the other side of the site to where the theft is taking place and only gets to the scene of the theft when it is too late.

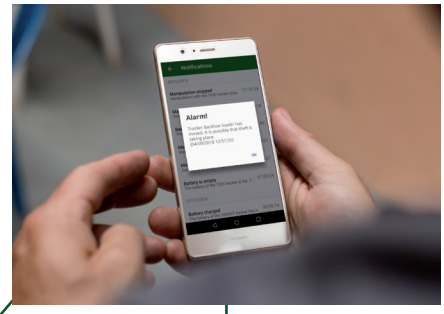
Placing the GPS tracker onto the objects that will be monitored

Name the GPS tracker in the application according to the object monitored and set the “Guarding” mode. After this you can leave.

The thieves arrive

1. **They steal materials and during this the GPS tracker is thrown off**
2. **They open the door of a portable cabin. The GPS tracker is on the door**
3. **They steal tools or machinery on which trackers have been mounted**

Even if someone removes the tracker, you still know where the tracker is.



You receive notification on your mobile phone that the tracker has moved – you know that theft is occurring and specifically what is being stolen.

You can go to the scene of the crime immediately so that you can catch the thieves in the act

If the thieves are no longer there but a tracker is fixed to the stolen object, you can follow the movement of the object on the application

Switch to “Pursuit” mode, follow the thieves and call the police

THEFT OF BUILDING MATERIALS

Does theft of materials occur on your construction site(s) mean that you needlessly lose a lot of money? Choose the materials that have got the highest value or those materials that are most commonly stolen. Place the tracker so that it is on the upper part of the materials, this meaning that the thieves move it first. This gives you valuable time to catch them. When the tracker moves, you receive notification immediately.

It is possible to guard virtually anything: bricks, curbing stones, breeze blocks, glass wool, traverses, steel rods, round mesh, wire mesh, pallets stacked with pavement cubes, pallets stacked with cement sacks, sand, gravel, pipes, waterproofing, packages of extruded polystyrene, wooden boards, scaffolding – basically anything that you can think of.

WHERE SHOULD THE GPS TRACKER BE PLACED?

Put directly into the monitored materials

For securing, use anything normally found on a site (e.g.foam padding)

Bury into loose materials (sand, gravel, etc.)

Wrap into plastic covering of materials

Place inside something (e.g. a plastic bottle) that thieves will throw off

Mount onto metal surfaces (fixed by magnets)

THEFT OF PROPERTY FROM PORTABLE CABINS, CARS AND SITES

Even though sites are usually fenced off and portable cabins locked, thieves make holes in the fence and then break down cabin doors to get inside. It is recommended not to leave equipment, tools and machinery on the site but sometimes it is not possible to store these away securely. Furthermore, fixtures and fittings already built into new buildings such as boilers and radiators are also often stolen.

A solution is to place GPS trackers onto entrance doors or windows. If someone opens these, you immediately receive notification. Trackers can also be put into tool case or mounted by magnets onto the object that you need to monitor. Even if you do not catch the thieves in the act you can still monitor the movements of the stolen object.

It is suitable for protecting objects locked inside portable cabins or vehicles, hand tools and power tools (in boxes/cases), dryers, heaters, road signs, wheelbarrows, etc.

WHERE SHOULD THE GPS TRACKER BE PLACED?

Mount (magnetized side) onto portable cabin doors or windows

Place onto door of vehicle used to transport materials to site

Put the tracker into the case with the monitored equipment

Put onto metal surfaces of radiators, boilers already (built into- within) buildings

Mount (by magnets) in a concealed place

Mount (by magnets) onto scaffolding

THEFT OF CONSTRUCTION MACHINERY AND EQUIPMENT

Some thieves specialize in the theft of construction machinery and expensive building equipment. They use universal keys from various construction machinery and with these they then start the machine easily. Smaller construction machinery is loaded onto a trailer (or digger) and taken away. Product markings are modified on stolen objects which are then sold to interested parties both locally and abroad. The financial damage of this runs into millions and the police are usually unable to catch the offenders. Construction machinery often has other GPS devices mounted inside but experienced thieves are able to put these out of commission. It will not occur to them though that the object is being monitored by a second GPS tracker that is not connected to the battery and which will remain on alert for up to 8 months. The tracker can be mounted discreetly onto metal parts, chassis or concealed places on the machinery or equipment. If the object moves, you receive notification of this on your mobile phone. If a thief steals the object you can see on the mobile application where it is moving and can then call the police. It is suitable for backhoe loaders, trucks, wheel loaders, hydraulic hammers, steamrollers, compactors, vibration rammers, trailers, containers, etc. – basically for anything that has got metal surfaces or that can have a tracker placed inside.

WHERE SHOULD THE GPS TRACKER BE PLACED?

ON THE MOBILE APPLICATION YOU CAN SEE WHERE MACHINERY AND EQUIPMENT IS AND YOU CAN ALSO MONITOR THEIR MOVEMENTS

Mount the GPS tracker onto metal surface (by magnets)

Put into a hidden place

Put onto the underside (trailers, etc.)

Put onto the bottom or sides of a container

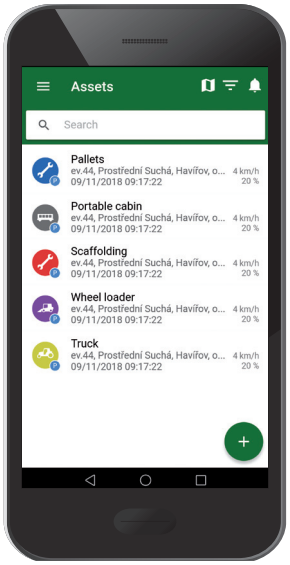
Put onto metal surface of construction equipment

EASY SETTING, USAGE AND OPERATION - Simple mobile application

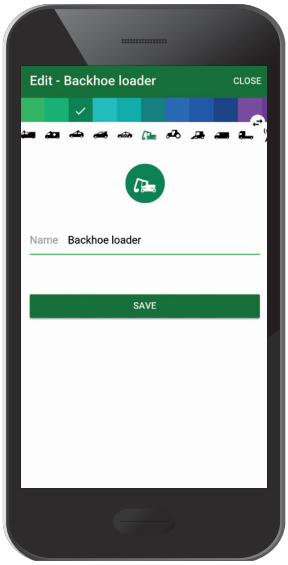
When you are out in the field it is possible to display all important information immediately on the mobile application: the name given to the tracker, where it currently is, the history of its movements, navigation to its last known position, what operation mode the tracker is set in, whether the battery has enough energy left and further details. Do you also want to use the tracker for purposes other than guarding property for example monitoring the movement of construction machinery on various sites, monitoring the movements of site visitors and vehicles, etc.? Choose from one of 7 operation modes depending on your current needs.

The application works anywhere that you are online

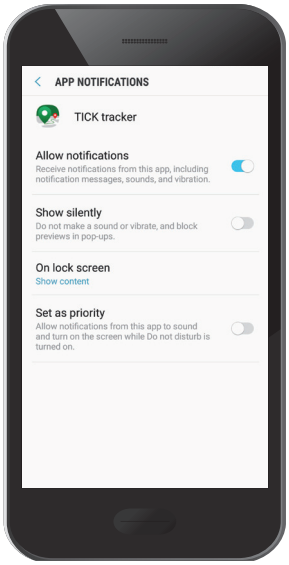
Choice of trackers in the menu



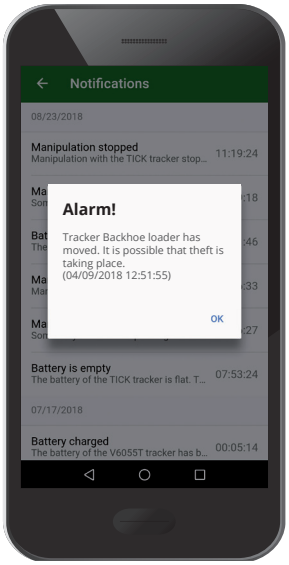
Naming the tracker according to what you need to monitor



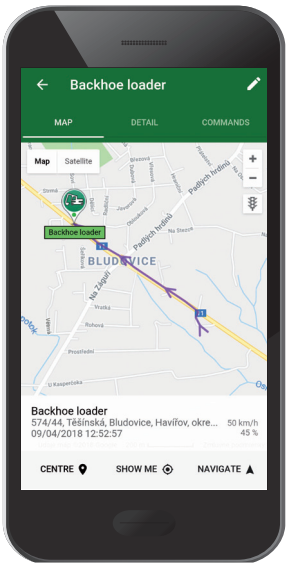
Setting of notification sending on application (may differ according to Android/iOS device versions)



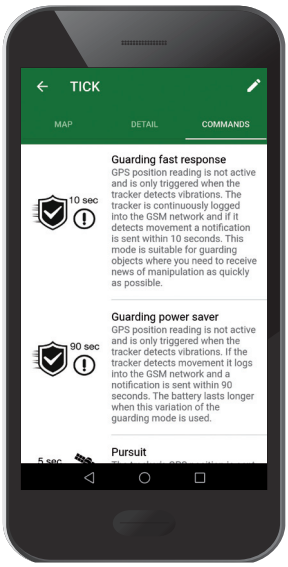
Notification that the tracker has detected movement, thieves are stealing



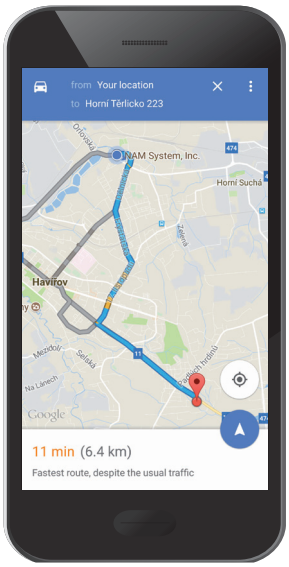
Display of the current location of the tracker on the object that the thieves left with



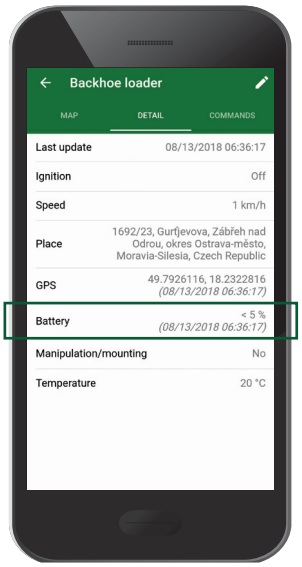
Selection of mode Pursuit – you want to know where the thief is going with your property



GPS navigation with display of route



Check battery energy level status (e.g. before putting on new object)



Download the TICK tracker application here: GET IT ON Google Play | Download on the App Store

GPS TRACKER BATTERY LIFE (between charging)

GPS tracking using the TICK tracker can be set according to actual needs; from sending a location once in a while up to monitoring continuously. It must be remembered, though, that continuous sending of GPS positions is demanding on energy levels and influences the length of battery duration. Choose between the 7 operational modes for the optimum mode as this affects the operating time in the field without the need to recharge. In this way you can extend the duration of battery life (between charging).

Operation 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.

- When moving, locations are registered every 10 sec and sent to the mobile applications once a minute.

Time GPS is switched on	Endurance (hours)	Endurance (days)
GPS is idle (the device is not in motion)	6240	260
1 hour motion/23 hours idle	912	38
4 hours motion/20 hours idle	264	11
6 hours motion/18 hours idle	180	7,5
8 hours motion/16 hours idle	132	5,5
12 hoours motion/12 hours idle	84	3,5
Constantly in motion	36	1,5

Usages: General monitoring of vehicles, people, etc..

Guarding fast response

GPS position reading is not active and is only triggered when the tracker detects vibrations. The tracker is continuously logged in to the GSM network and if it detects movement, notification of this is sent within 10 seconds. The tracker is ready to immediately receive messages to switch to a different mode e.g. Pursuit.

Endurance (hours)	Endurance (days)
480*	20*

Usages: This mode is suitable for guarding objects that are nearby to you – you can intervene immediately e.g. tools in a car or on a construction site during working hours, expensive building materials.

Guarding power saver

GPS position reading is not active and is only triggered when the tracker detects vibrations. If the tracker detects movement, it logs into the GSM network and notification is sent within 90 seconds. The tracker is ready to receive messages to switch to a different mode e.g. Pursuit at the time when the monitored object moves.

Endurance (hours)	Endurance (days)
6240*	260*

Usages: This mode is suitable for long-term guarding e.g. for items mounted into buildings that are on the site for a longer period but are ready to use e.g. radiators, boilers, pipes, etc. The battery life is longer when this guarding mode is used.

Pursuit

GPS locations are sent continuously every 5 seconds regardless of whether the monitored object is moving or standing. After 60 minutes the tracker 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 – 30 (depending on the availability of the GSM signal)

Usages: Monitoring moving objects. Provides instant information of trip routes. Suitable for monitoring objects after theft.

Power OFF

This is the recommended mode 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

We are continually improving our GPS tracker and firmware.The battery life may differ depending on its hardware and firmware versions. Verify your version on: **www.namsystem.com/tick-activation**

Do you want to use your GPS tracker for other usages apart from guarding property?

On the same link as stated above you can look at further modes: **Standby** / **Asleep** / **Periodic Wake-up**.

* N.B. This applies in conditions where the tracker is permanently idle / without vibrations.

NAM system, a.s.
U Pošty 1163/13
735 64 Havířov – Prostřední Suchá, Czech Republic
Tel.: (+420) 596 531 140, E-mail: sales@namsystem.com
www.namsystem.com