

WHITEPAPER

Smarter Construction Site Management with IoT Tracking

Locate equipment. Reduce theft risks.
Optimize resource utilization.

Construction equipment, tools, and materials frequently move between locations. When managing multiple construction projects, limited visibility makes planning more difficult and increases the risk of loss and theft. **Wireless IoT** technology enables automated asset location and movement tracking. GPS trackers and BLE technology provide greater visibility into mobile assets, helping construction companies streamline site logistics. All tracking data is consolidated in the central **iDTRONIC IoT Platform**.

Locate Assets

Track equipment and tools across multiple sites.

Reduce Losses

Monitor valuable assets and minimize theft risks.

Optimize Transport

Track asset movements and improve transport planning.

Manage Resources

Deploy available equipment more efficiently.

Why Asset Visibility Matters on Construction Sites

An excavator is located at a different site than expected. A cable drum has been delivered but cannot be found. Several transport racks have been at different customer locations for weeks.

These situations complicate daily construction operations. Without centralized visibility, equipment locations must be checked manually, machinery needs to be tracked down, and material movements become difficult to trace.
Companies managing multiple construction projects need reliable information about where their assets are and when they are available.

Common Challenges in Construction Operations



1

Limited Visibility into Equipment Locations

Machines, tools, and other assets frequently move between construction sites. Without a central overview, it is often unclear where equipment is located or whether it is available for the next job.

Increased Search and Planning Effort
Locating equipment manually wastes valuable time.



2

Theft and Material Loss

Valuable materials and mobile equipment are not always adequately secured on construction sites. If assets are removed without authorization, tracking their whereabouts can be difficult.

Increased Risk of Loss
Theft and missing materials lead to additional costs.



3

Limited Visibility into Asset Movements

Skip containers, glass transport racks, and other reusable load carriers regularly move between warehouses, construction sites, and customers. Missing location data can delay their return and reuse.

Delayed Asset Returns
Lack of location data makes asset recovery and reuse more difficult.

Protect Copper Cables and Cable Drums Against Theft

Copper cables are valuable construction materials and are often exposed to theft risks on job sites. GPS trackers enable location monitoring of cable drums, helping reduce losses and associated costs. Automatic alerts can be triggered when unexpected movements are detected or assets leave predefined geographic areas.

Two Tracking Solutions for Cable Drums

External Mounting

The **AT90 Universal Tracker** enables location monitoring of cable drums and other equipment. Its strong magnetic mounting system allows flexible installation on suitable metal surfaces.



Up to 2 years standby* · IP65 · Magnetic mounting

Concealed Installation

The compact **AT98 TrackMini Plus** can be installed inside a suitable recess for discreet asset monitoring. Its concealed position makes the tracker more difficult to locate and remove.



Up to 3 years standby* · 12.2 mm slim · Motion detection

*Maximum standby times are achieved under specific power-saving conditions and depend on device configuration.

From Unexpected Movement to Automatic Alerts

Set Up a Geofence
Register the cable drum at its designated location.

→

Detect Movement
The tracker reports a predefined event.

→

Notify Responsible Personnel
Review the asset location and alert details.

The Benefit: Unexpected location changes become visible sooner. In the event of theft, recorded location data can help trace missing assets.

Track Containers, Transport Racks, Cables and Tools

Skip containers, cable drums, and transport racks regularly move between warehouses, construction sites, and customers. IoT tracking provides visibility across locations, helping companies manage asset returns and reuse more efficiently.



1

Tracking Skip Containers, Cable Drums and Containers

GPS trackers monitor the location of containers and other assets throughout their use. Construction companies can track asset distribution, improve visibility, and reduce the time spent searching for equipment.

AT90 Universal Tracker
Up to 2 years standby · IP65 · Magnetic mounting



2

Tracking Window and Glass Transport Racks

Reusable transport racks regularly move between production facilities, warehouses, and construction sites. IoT trackers make it easier to track their movements and locate missing racks, supporting efficient load carrier management and timely returns.

AT98 TrackMini Plus
Up to 3 years standby · 12.2 mm slim · Motion detection



3

Tracking Tools and Equipment Indoors

BLE tracking enables location monitoring of smaller tools and equipment within indoor areas. Compact BLE tags transmit signals to installed gateways, allowing companies to identify the last detected zone of an asset.

BB15 Universal Asset BLE Tag + GT52 BLE Wifi Gateway
BLE Tracking · Motion Detection · WiFi Connectivity

Track Asset Locations
Monitor equipment across multiple sites.

Reduce Search Time
Locate misplaced equipment faster.

Simplify Asset Returns
Streamline the return of reusable load carriers.

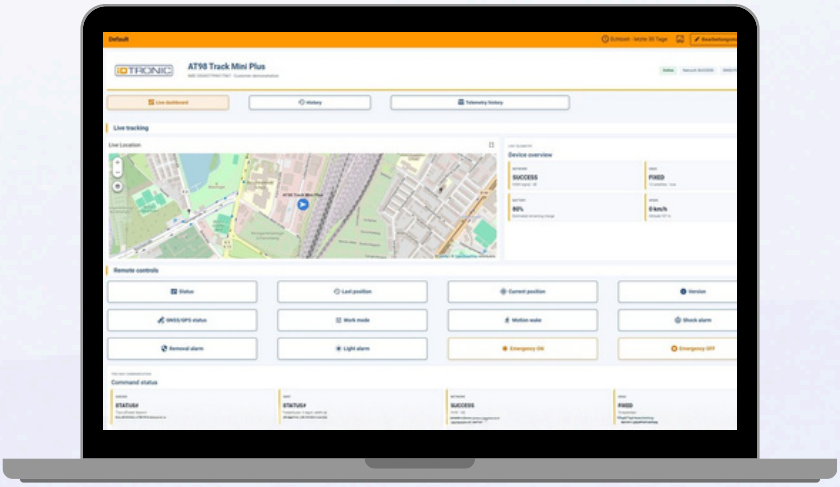
Improve Availability
Make better use of existing equipment.

IOT. TRACKING. CONSTRUCTION.

All Your Construction Sites. One Platform.

The iDTRONIC IoT Platform

The iDTRONIC IoT Platform brings location and movement data from connected trackers into one centralized system. Construction companies gain a clear overview of their machinery and equipment, even when assets are spread across multiple job sites.



Key Features at a Glance

Centralized Asset Visibility
Monitor machinery and equipment across multiple locations.

Geofencing & Alerts
Receive automatic notifications when assets move outside predefined areas.

Movement History
Track location changes and review historical asset movements.

User Management
Assign individual access permissions to site managers and employees.

Device Management
Monitor battery levels and manage tracker settings centrally.

System Integration
Connect tracking data to existing systems via API interfaces.

Test IoT Tracking on Your Construction Site

Get started with three GPS trackers and three months of access to the iDTRONIC IoT Platform – ideal for evaluating asset tracking under real-world conditions.

IoT Test Kit: 3 Trackers + 3 Months of Platform Access for €500

Test-Kit anfragen



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