

# Flexible all-in-one solution with RTLS for Track & Trace in intralogistics

## Real-time locating & AutoID combined

AIT Goehner offers a new all-in-one solution for the entire intralogistics, especially for production areas with large areas.

The combination of real-time locating / RTLS based on UWB (Ultra-Wideband) with identification technologies (barcode/RFID), AIT enables a cost-effective and at the same time exact, indirect location of all assets on the shop floor.

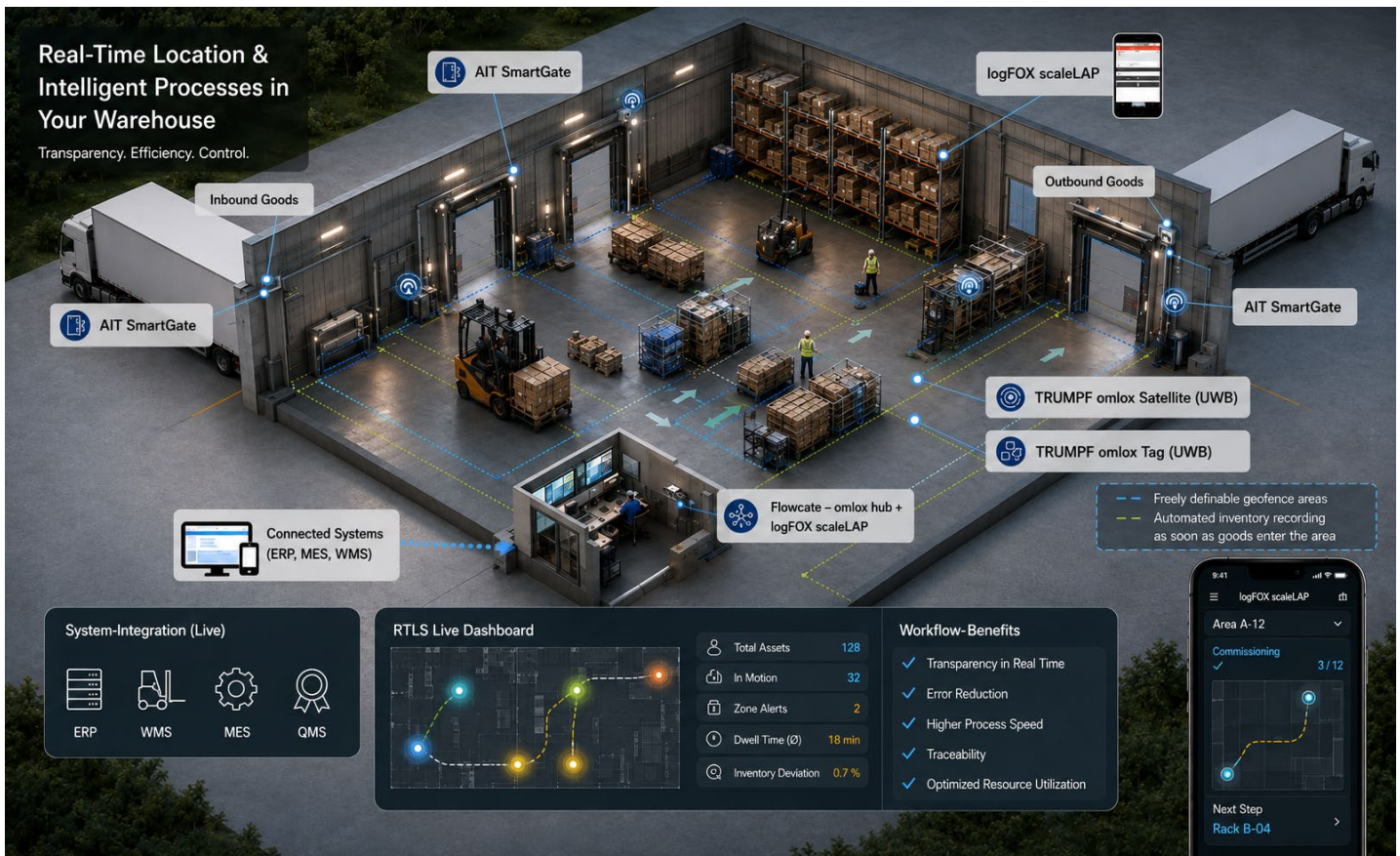
Geo-Fencing (pre-defined areas) allows for the automation of booking/scanning processes, which relieves employees and increases process and planning reliability.

The result: automation and seamless tracking of the location, condition and status of all assets on the shop floor.

- ✓ products
- ✓ goods
- ✓ part containers (e.g. pallets, mesh box pallets)
- ✓ vehicles
- ✓ tools
- ✓ equipment

between incoming and outgoing goods.

In Kooperation mit

**Real-Time Location & Intelligent Processes in Your Warehouse**  
Transparency. Efficiency. Control.

**System-Integration (Live)**  
ERP, WMS, MES, QMS

**RTLS Live Dashboard**

Total Assets	128
In Motion	32
Zone Alerts	2
Dwell Time (Ø)	18 min
Inventory Deviation	0.7 %

**Workflow-Benefits**

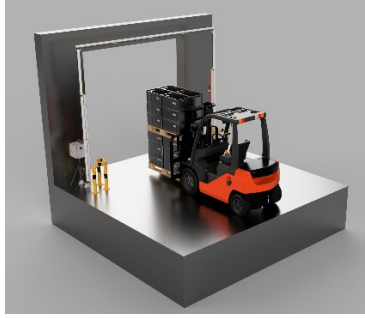

- ✓ Transparency in Real Time
- ✓ Error Reduction
- ✓ Higher Process Speed
- ✓ Traceability
- ✓ Optimized Resource Utilization

**Legend:**  
--- Freely definable geofence areas  
--- Automated inventory recording as soon as goods enter the area

**Mobile App (logFOX scaleLAP):**  
 Area A-12  
 Commissioning 3 / 12  
 Next Step Rack B-04

**How it works**

The goods arrive at the goods receiving area. There, all 1D/2D codes on up to three sides (or RFID tags) are automatically recorded with the AIT SmartGate from AIT Goehner and transferred to the WMS/ERP system via logFOX scaleLAP.





<p><b>AIT Smart Gate + logFOX scaleLAP</b></p> <ul style="list-style-type: none"> <li>✓ automatic reading of all 1D/2D codes</li> <li>✓ on up to three sides</li> <li>✓ in motion or at standstill</li> <li>✓ automatic booking in the WMS/ERP system</li> </ul>		
	<p>AIT SmartGate</p>	<p>logFOX scaleLAP</p>

Industrial trucks are provided with a TRUMPF UWB tag. Goods and vehicle are "married" to each other and linked to form an object. Using the TRUMPF UWB RTLS infrastructure (omlox core zone), the real-time localisation of the driving systems takes place in the entire indoor area (for the outdoor area, localisation via GPS is possible). If the goods are parked by the vehicle, the last known position is transferred to the goods. The goods can be reassigned to a vehicle by means of renewed identification on the vehicle or by the next AIT SmartGate.

The capture of the goods issue and the comparison with the loading list are carried out automatically and without further hardware on the basis of Geo Fence Events.

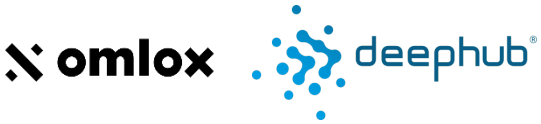

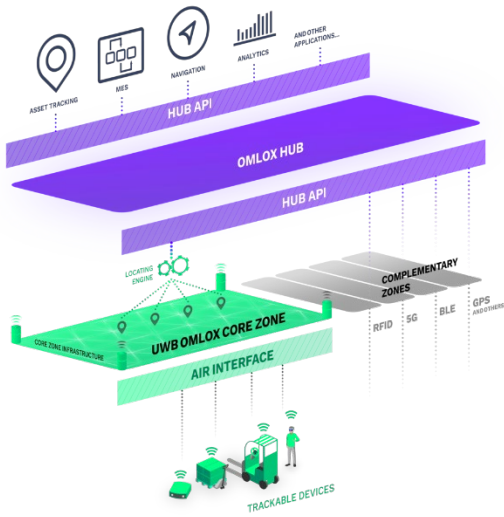
The connection to the WMS/MES and thus the automated goods booking, status and location changes are carried out with scaleLAP from logFOX.

The integration and interoperability of the individual hardware and software components is carried out via the DeepHub locating middleware from Flowcate.

<p><b>TRUMPF UWB tag, satellite und locating engine + omlox hub von Flowcate + logFOX scaleLAP</b></p> <ul style="list-style-type: none"> <li>✓ RTLS/real-time locating</li> <li>✓ Integration in WMS/MES</li> <li>✓ automated booking of goods, status, location</li> <li>✓ visualisation via web frontend</li> </ul>		
	<p>TRUMPF omlox satellite (UWB)</p>	<p>Flowcate DeepHub</p>
		
	<p>TRUMPF omlox tag (UWB)</p>	<p>logFOX scaleLAP</p>

## Standardisation & interoperability as a basis

The UWB system and DeepHub support the omlox standard, the revolutionary open standard for tracking technologies. This makes the overall solution maximally flexible, technology and hardware agnostic, future-proof and economical.

   <p>omlox and DeepHub explained in 2 minutes</p> <p><b>SCAN ME!</b></p>	
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## The benefits at a glance

- ✓ Automated and secure recording of the entire material flow from goods receipt to goods issue
- ✓ Transparent intralogistics through seamless and precise asset tracking
- ✓ Virtual storage areas through geo-fencing
- ✓ Absolute minimisation of waiting and search times, empty runs and losses by eliminating manual booking procedures
- ✓ Optimisation of production through acceleration of processes
- ✓ Increase in quality through error prevention, adherence to deadlines and delivery reliability
- ✓ Comprehensive combination options for all technologies (e.g. with RFID)
- ✓ Individually customisable complete solution with optional expansion options through open, standardised interface
- ✓ Possible extensions e.g.
  - >> Identification by RFID
  - >> AIT EasyID Point / Identification of pallet types, strapping etc.
  - >> GPS localisation for the outdoor area

### The expert for individual counselling

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