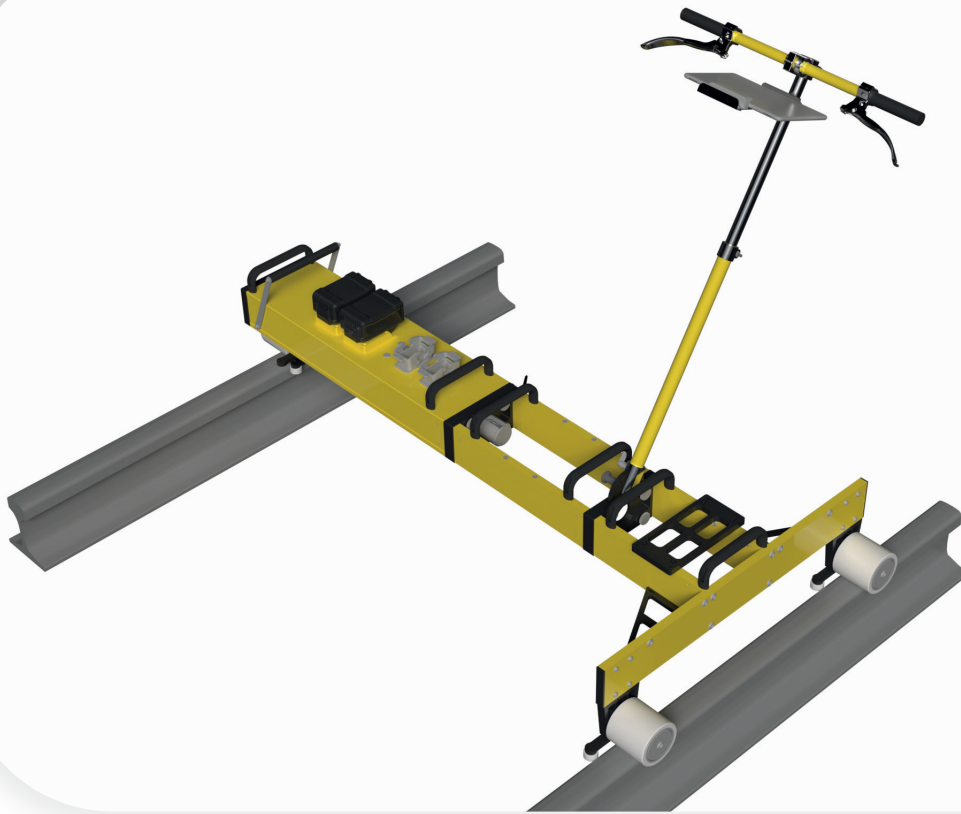




Railscout - Inspection Trolley

Manual Modular Inspection Trolley for Railway Applications

RailScout is a push-operated trolley, designed as a flexible platform to host different railway monitoring systems, including rail profile, corrugation, clearance and track geometry.



**Manual Push
Operated**



**Lightweight &
Portable**

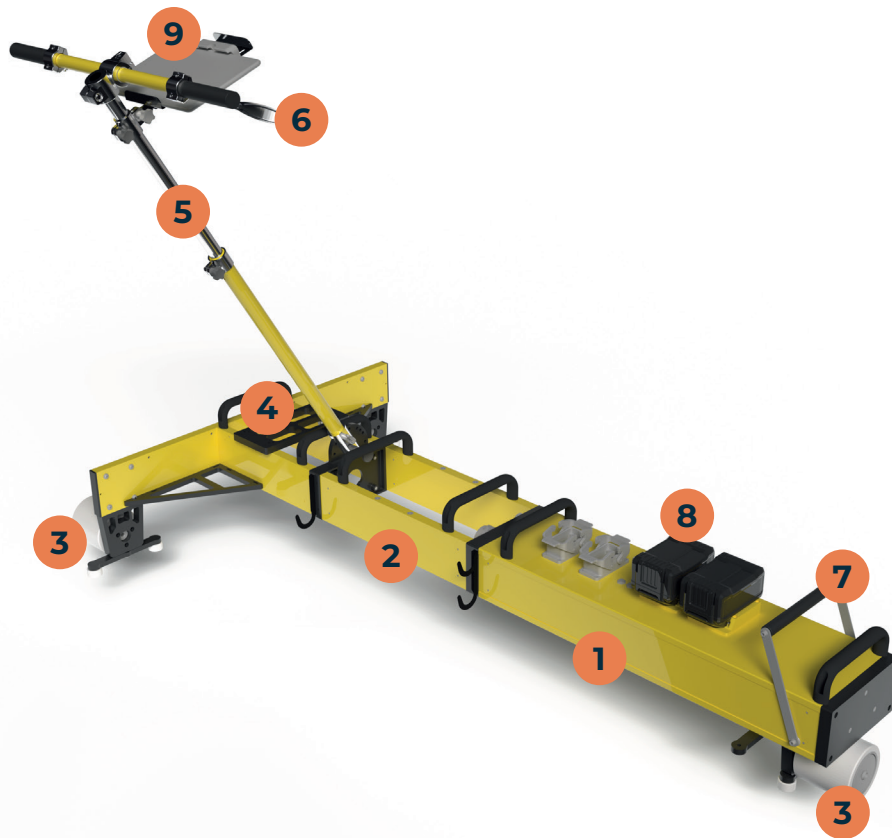


**Modular
System-Ready
Platform**



**Multiple
Railway
Monitoring
Applications**

Trolley Architecture and Main Components



- 1 Three-Section Modular Frame:** aluminum structure composed of three main sections, designed for easy handling, transport and fast on-site assembly.
- 2 Interchangeable Central Module:** replaceable central module allowing quick adaptation to multiple track gauge extensions.
- 3 PET Wheels:** three PET wheels as standard, or alternative materials available upon request.
- 4 System-Ready Mechanical Platform:** designed as a neutral base platform ready to host different railway inspection systems.
- 5 Turntable with Extendable Handlebar Arm:** allowing ergonomic operation and improved control during pushing and maneuvering.
- 6 Safety Brake System:** designed to ensure controlled movement, safe stopping and secure positioning of the trolley during operation.
- 7 Rail Wheel Locking System:** with mechanical lever and guidance wheels, secure stability during operation.
- 8 Dual-slot quick-coupling battery system for high-power devices:** allowing fast battery replacement without interrupting system operation.
- 9 Tablet Mount:** for real-time visualization of acquired data and on-site analysis.

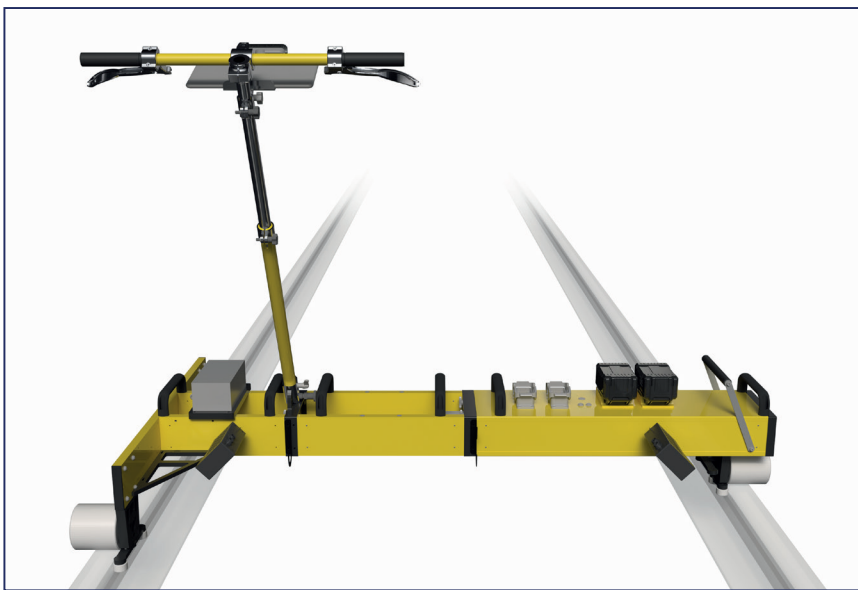
Portability & Field Operation

The Railscout Trolley is designed for **straightforward on-track operation**. Once positioned on the rails, it can be manually pushed along the track by a single operator, allowing the installed inspection devices to acquire data in a continuous and controlled manner.

Thanks to its **lightweight and modular structure**, the trolley can be **easily transported to site, quickly assembled and rapidly removed from the track** when required, ensuring operational flexibility and safety. The system is ready for operation within minutes, reducing setup time and improving inspection efficiency.



System Configurations

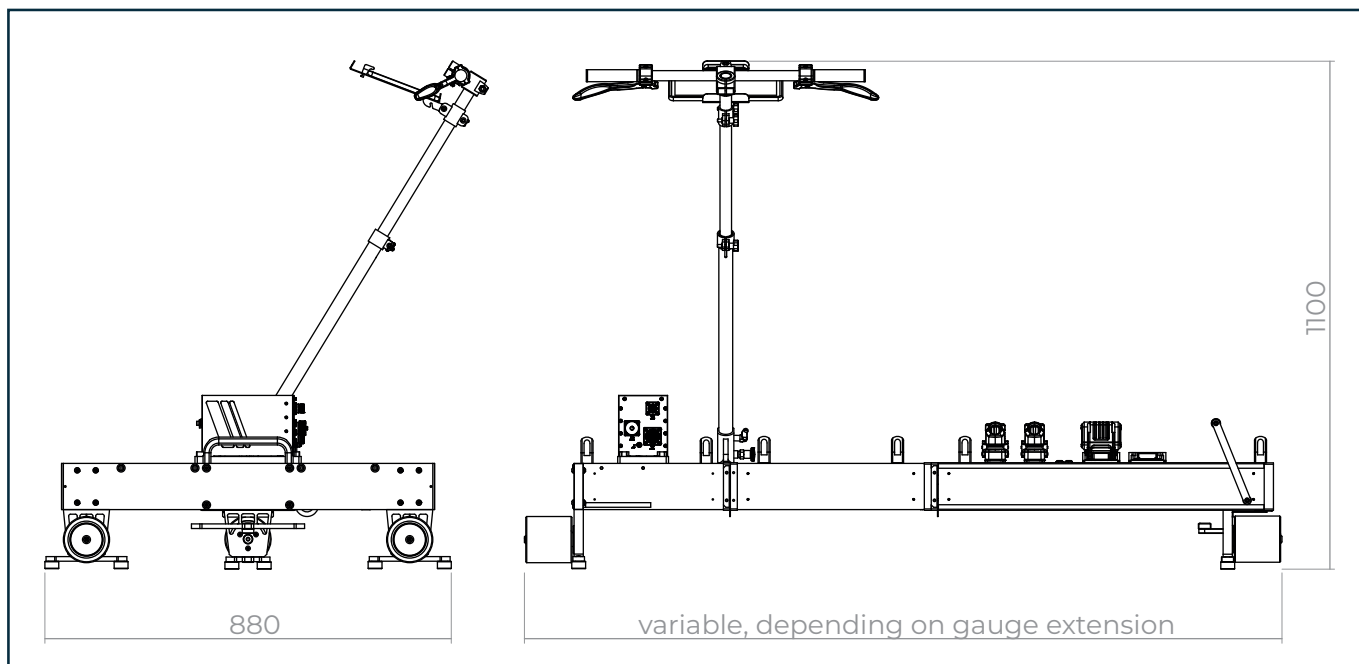


Railscout Trolley is a robust, system-ready mechanical platform with a modular structure, allowing **different inspection applications to be supported** depending on the installed payload, including railway track condition and geometry assessment.

Among the systems that can be installed are:

- **Rail Profile Measurement System:** designed for accurate rail profile measurement, enabling detailed rail condition analysis and **track geometry evaluation when combined with an inertial measurement unit (IMU)**.
- **Rail Corrugation Measurement System:** dedicated to the detection and analysis of rail corrugation and surface irregularities.
- **Clearance Measurement System:** consisting of a profiler for the assessment of track surroundings and clearance envelopes along the railway line.

Technical Specifications



Trolley Parameters	Value
Trolley Type	Manual push-operated
Frame Material	Aluminum
Wheel Material	PET (others on request)
Gauge Extensions	1000, 1067, 1220, 1372, 1435, 1495, 1520/1524, 1600, 1668/1676 mm and many more on demand
Breaking System	Dual manual brake
Power Supply	Dual battery system
Working temperature range	-10° to 50°C
Humidity (non-condensing)	< 80 %
Integrable Systems	Rail Profile Measurement System, Track Geometry Measurement System, Corrugation Measurement System, Clearance System, additional sensors and custom inspection modules (on request)