



We provide a comprehensive range of railway surveying, measurement and inspection solutions and are the exclusive UK distributor of Amberg Technologies.

Amberg Technologies has been a leading provider of specialised rail and tunnel measurement systems for over 30 years and are regarded as being at the forefront of geospatial referencing for civil engineering and construction.

The unique combination of industry knowledge and engineering expertise has produced innovative and flexible systems based on practical designs and user-friendly software.



GRP System FX

The universal track surveying system GRP System FX, with modular system components, can be configured with the GRP 1000, GRP 3000, or the GRP 5000 to meet the most stringent and demanding project requirements.

It is a universal system solution, configurable for user specific applications while new technology enables automatic comprehensive railway surveys. Its powerful software modules allow data evaluation with minimum user intervention. System FX has specific applications to enable efficient survey of track geometry, clearance profiles, and infrastructure data, with adjustable options for display of results, and high quality technology to give a high return on the investment.



GRP System FX

GRP 1000 Rail Surveying System



The Amberg GRP 1000 rail surveying system is configured for high accuracy and high productivity track measurement and construction. Amberg GRP 1000 is perfect for slab track construction, ballasted track construction and maintenance, and quality control of track geometry.

It has precise 3D track coordinates when used with the Leica total station; gives results and corrective data in real time; records the outer and inner track geometry; and offers optional expansion to the GRP 3000 or GRP 5000 series.

GRP 3000 Rail Surveying System



The Amberg GRP 3000 is the comprehensive system solution for point survey of clearance as well as track geometry survey. It is perfect for clearance profile surveying, catenary works, design surveys, and track geometry surveys.

It offers a unique combination of the precise track geometry recording unit TGS FX and the Profiler 100 for automatic clearance profile surveying. The visible red laser dot allows accurate and rapid manual surveying of specific points, with real time comparison between as built and theoretical clearance envelopes, through a highly flexible and configurable data interface, to enable precise coordinate surveying in combination with the Leica total station. The system can be expanded into the GRP 5000.

GRP 5000 Rail Surveying System



The Amberg GRP 5000 is the mobile system rail surveying solution for complete route documentation and comprehensive infrastructure analysis. It gives complete clearance profile analysis, inventory and design surveying.

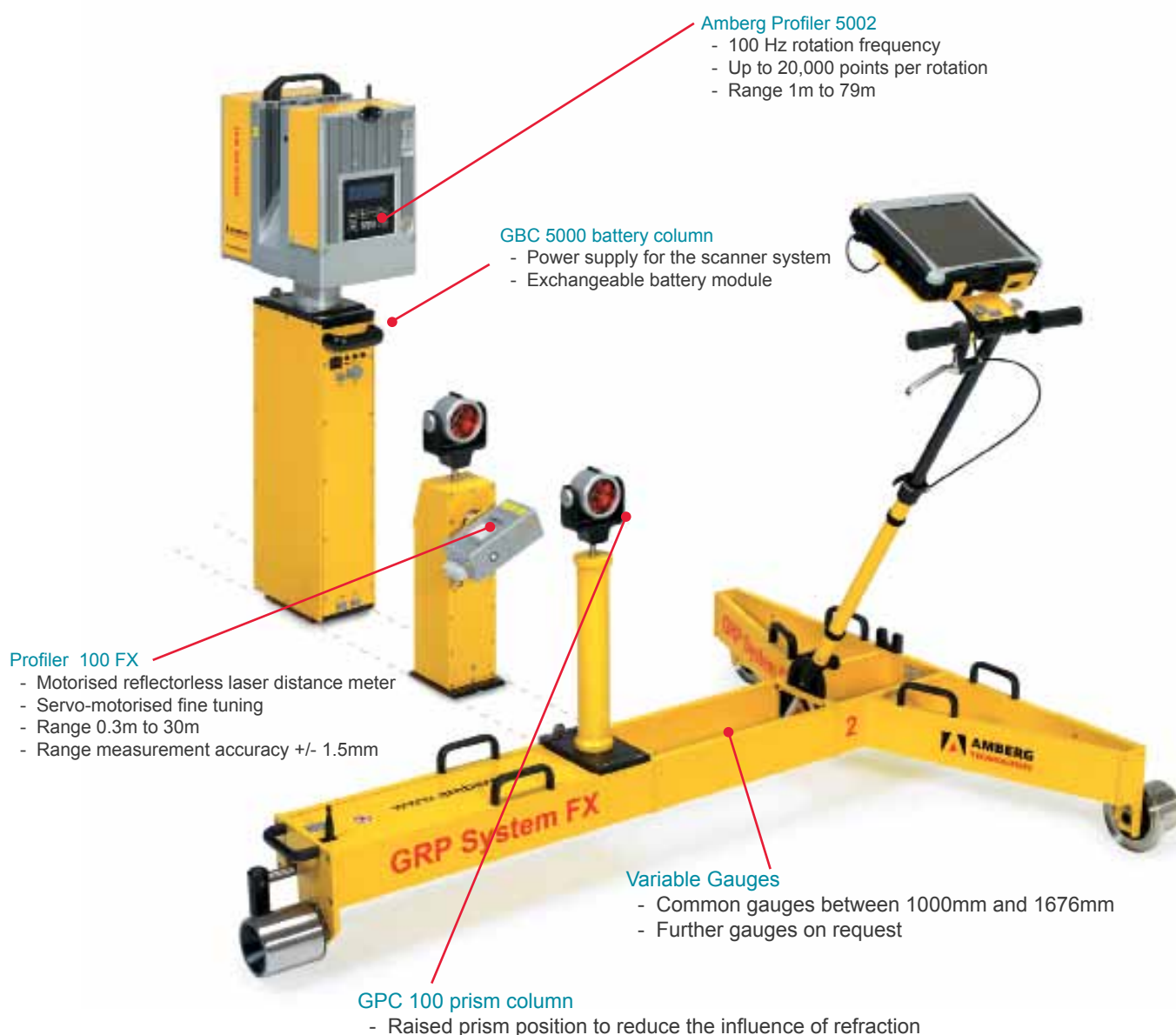
It will enable automatic acquisition of the track environment, a very high measuring density with up to 500,000 measured points per second, high resolution of geometric data, complete clearance checks based on the measured data, and modularity and functionality due to the GRP FX concept.

If you require further information or would like to take a closer look at the features of the GRP System FX then please contact our sales team on 01480 404888 and we will arrange a demonstration of the system.

GRP System FX

The platform of the GRP System FX is the TGS FX track gauging trolley.

Manufactured to the highest engineering standards, it combines precision sensors with practical design, making the GRP System FX a reliable partner in the challenging railway survey environment.



Georeferencing

Leica GPS

- For general surveying with lower (GPS) accuracy demands
- GRP System FX is compatible with Leica GPS systems GPS1200 and GPS500
- GPS integration kit including antenna pole, installation and accessories

Leica TPS

- For track surveys at the highest precision
- GRP System FX is compatible with Leica total stations TS30 / TS15 / TPS1200 / TPS1100 (ATR required)

User Ergonomics

- For track surveys at the highest precision
- Fully adjustable push handle
- Balanced device for safe one man operation
- Dead-man's brake to prevent unintentional trolley movement.



Key Features



Lightweight System

- Light, high precision frame construction
- System can be easily dismantled for transportation
- Ready to measure in minutes



Gauge Sensor

- Accuracy +/- 0.3mm
- Measurement range -25mm to 65mm in relation to nominal gauge
- Measurement reference 14mm under top of rail



Precision Wheels

- High specification synthetic (PET) wheels for complete conductless operation
- Stainless steel wheels with isolated core



Trolley Adjustment Set

- Adjustment kit for regular trolley accuracy checks
- GRP Fidelity software
- Nominal gauge frame and accessories