

TRACKING

Frauscher Tracking Solutions FTS-FAS⁺



FTS-FAS⁺ combines Frauscher Acoustic Sensing FAS and proven wheel sensors. Overlaying data from both approaches significantly increases the possibilities of applying the received information. Based on smart interface designs, adding wheel sensor information to the FAS system can be done simply and quickly.



INFORMATION

Position, speed, acceleration, direction, train length, estimated time of arrival (ETA)

Rail defects, flat wheels, catenary flashover, rock fall

Work crews, trespassers, cable theft, vandalism, animals etc.



APPLICATIONS

Train tracking (non vital)

Asset condition monitoring

Safety and security



BENEFITS

Enhanced data quality

Activities and alarms logged and categorised

80 km of optical fibre monitored per FTS unit

Alert location accuracy 10 m

Continuous real-time tracking along total network

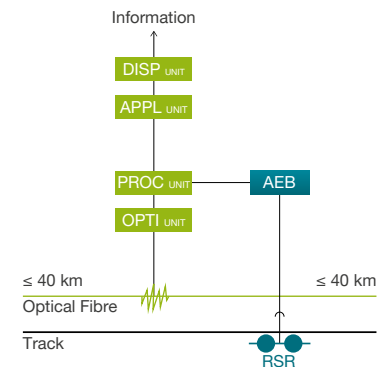
FTS-FAS⁺

Frauscher integrates digital data from wheel sensors into the FAS system to match and overlay train signatures from both sensing systems. This increases the information output significantly.

Trains can be assigned to tracks and their length can be determined exactly. Furthermore, detected events and asset conditions, such as flat wheels, can be localised more accurately.

DISP UNIT Display Unit
APPL UNIT Application Unit
PROC UNIT Processing Unit
OPTI UNIT Optical Unit

AEB Evaluation board
RSR Wheel sensor



Technical Data

FTS-FAS

Interfaces	FAS Display Unit, XML, MODBUS SCADA, email and SMS notification
Power requirements	115 V or 230 V – peak power consumption: 1 000 W
Required fibre type	Single-mode ITU-T G.652, G.654 or G.655
Laser	Class 1
Distance monitored per system	2 x 40 km (unlimited distances enabled by multiple network systems)
Operating temperature range (server)	+5 °C to +40 °C
Dimensions	Height: 1 300 mm Width: 800 mm Depth: 800 mm
Weight	120 kg

RSR123

Temperature	-40 °C to +85 °C
Humidity	Up to 100%
Electromagnetic compatibility	EN 50121-4
Conditions	UV resistance: yes Protection class: IP65 / IP68 to 8 kPa/60 min. Wheel diameter: 300 mm to 2 100 mm Speed: 0 km/h (static) to 450 km/h

More information can be found on the RSR123-AEB datasheet.