

TRACKING

Frauscher Tracking Solutions FTS



Track and monitor trains, assets and personnel in real time by using a single solution – on and near your track. The existing fibre along your track becomes the continuous sensor and no additional infrastructure or components on track or train are needed.



INFORMATION

Train position, speed, acceleration, direction, length, estimated time of arrival (ETA)

Track and train defects, natural hazards, catenary flashover

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



APPLICATIONS

Train Tracking

Asset Condition Monitoring

Safety & Security



BENEFITS

Activities and alarms logged and categorized

80 km of optical fibre monitored per FTS unit

Alert location accuracy 10 m

Continuous real-time tracking along total network

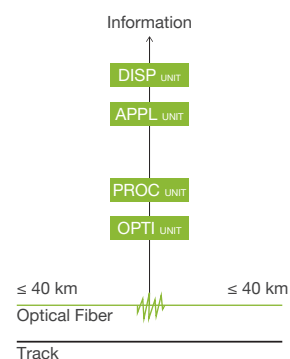
Low maintenance

FTS

A networked set of FTS units provides coverage across a whole network regardless of length. The system converts the fibre cable into sensing channels that work like virtual microphones. Detected events can be localized with a maximum accuracy of down to 10 m.

For vital applications and to enhance the quality of information, wheel detection systems and axle counters can be integrated.

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



Technical Data

FTS

Interfaces	FTS Display Unit, XML, MODBUS SCADA, email and SMS notification
Power requirements	+115 V AC or +230 V AC – peak power consumption: 1 200 W
Required fibre type	Single-mode ITU-T G.652, G.654 or G.655
Wavelength	1 540 nm
Laser	Class 1
Connection type	E2000 APC
Fibre cable signal quality	Loss per km <0,25dB, step losses <1dB
Distance monitored per system	2 x 40 km (unlimited distances enabled by multiple network systems)
Fibre cable installation recommendation	Buried, installed in a cable trough (minimum distance to track)
Typical data rate (80 km)	600 MB/s
Operating temperature range (server)	+5 °C to + 30 °C
Optional equipment	Cellular router, UPS
Dimensions	Height: 1 300 mm Width: 810 mm Depth: 850 mm
Weight	> 200 kg