



# TrainSWing LS07

## Automatic train protection

- Failsafe and reliable system meeting SIL4 requirements according to CENELEC
- Modern microprocessor based solution
- Easy operation
- High reliability, availability and stability
- Easy installation
- Easy maintenance
- Class B equipment according to applicable TSI CCS



### GENERAL DESCRIPTION

Automatic train protection system TrainSWing LS07 (further LS07) is a mobile part of train protection system of LS type. Its unified solution with TrainSWing STMLS module simplifies economic and technical requirements of migration strategy for ETCS implementation.

In the active mode "Operation", LS07 provides four basic functionalities:

- Transmission and display of signal information between the line and tractive vehicle
- Check whether the information transmitted was acknowledged and respected by train driver
- Check of the train movement authority
- Intervention to the braking system in case of negative outcome of checking function

A coded signal from the track circuit for a specific section is received by sensors

in front of the first axle. The received signal is digitally processed and then displayed for the train driver on the cab signal repeater.

LS07 evaluates every traffic situation by comparing signal aspect, actual train speed and reaction of train driver. If the response of train driver is inadequate, even after acoustic warning, LS07 generates the command to braking system of tractive vehicle.

During the train movement along the non-coded track or in case of restrictive signal aspect, LS07 also checks the driver's vigilance. In case of absence of adequate reaction, LS07 generates the command to braking system of tractive vehicle.

In the mode „Shunting“, LS07 checks maximum allowed speed and authority for train movement.

In case of negative result of checking functions, LS07 generates the com-

mand to braking system of tractive vehicle.

### BASIC TECHNICAL DESCRIPTION

The core of LS07 consists of Control computer - Panel LS07, control unit, cab signal and code reader. Panel LS07 is designed as a set of plug-in units installed in 19" subrack of 3U height.

LS07 has its own internal diagnostics. Diagnostic data and operational records are stored in an internal memory for prospective download to external USB or computer.





## BASIC TECHNICAL PARAMETERS

Input	max. 60W
Temperature range	-25 °C to +70 °C
Humidity	15 % to 95 %
EMC compliance	EN 50 155
Altitude	to 1400 m
Supply voltage	24, 48, 72, 96, 110V
Supply interruption	max. 10 ms
Supply voltage tolerance	-30 %, +25

