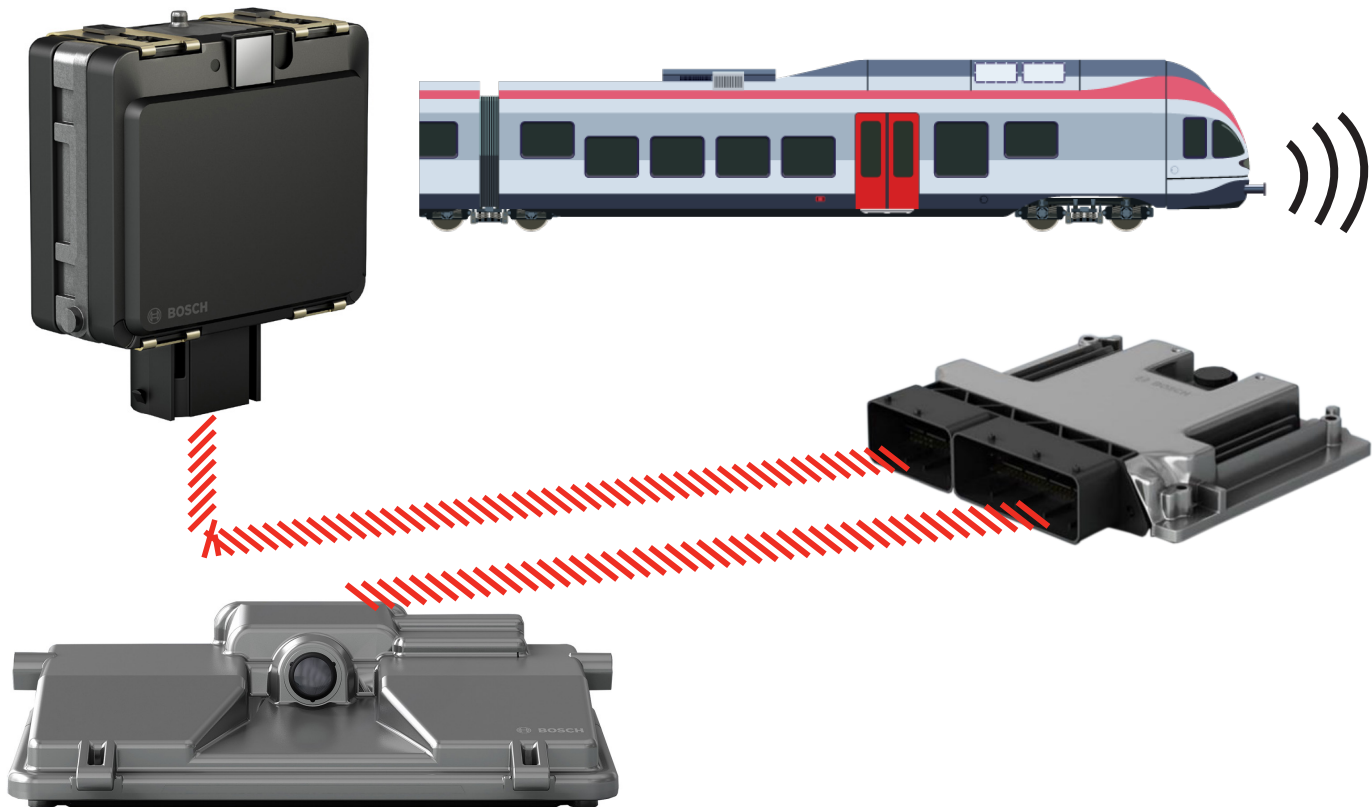


# TRAM FORWARD COLLISION WARNING SYSTEM

## TFCWS



The collision warning system consists of a multi purpose camera, a radar sensor, and a control unit. The multi purpose camera monitors the track ahead and transmits the data in real time to the radar sensor. Taking the vehicle's speed into consideration, the system uses the information to determine the danger of a collision. The system monitoring function gives the driver an overview of components' system status, which can be displayed using LED, for example. How the warning is given, the warning/braking thresholds, and other system parameters can be individually customized.

System	Type 1	Type 2
Aperture	up to +/-35° horizontal	up to +/-35° horizontal
Speed	max.80km/h	max.80km/h
Comptability	Electromagnetic compatability (EMC) as per DIN EN50121-3-2	Electromagnetic compatability (EMC) as per DIN EN50121-3-2
Output interface	6 digital outputs	8 digital outputs
Warning & Braking Threshold	can be tailored for customer	can be tailored for customer
Input Interfaces	up to 2 analog inputs e.g. speed signal, warning acknowledgment	up to 2 analog inputs e.g. speed signal, warning acknowledgment

### FEATURES

- Improved Safety through collisions by means of early warning system
- Lower Cost of repairs
- High availability of light rail vehicles fewer accidents means less downtime
- Simple integration thanks to compact components