



AXEL COUNTER PZN-1

- Three-element electronic system
Sensor – Transmitter – Computer
- Unified SW without modification need for different configurations
- Failsafe and reliable system based on 2oo2 principle
- Compatibility with any signalling system
- Up to 8 (eight) counting points within individual section of axel counter
- Tie-in axle counter sections
- No limitation of number of axle counter sections
- Highly modular unit with minimum components
- Easy installation, service, maintenance and reparability



General Description

PZN-1 Axle Counter is a system designed to detect and count railway vehicle axels and to evaluate track section occupancy.

Each track section is defined by maximum eight counting points. Each counting point can be common for preceding and following adjacent

sections (i.e. input and output). The total number of individually evaluated sections is not limited.

Basic Technical Description

Axel detection is ensured by Sensor which together with Transmitter forms the counting point.

Such counting point is connected to the Computer where information on the passage of number of axels and possible failures is transmitted.

Counting point is supplied either from the computer or from the local back-up source. The computer includes a rack with electronic modules which generate

OCCUPIED – UNOCCUPIED – FAILURE states (from data of individual counting points). In addition the directional signals are generated by computer for each counting point. For each counting point individual computer rack includes ZAP (counting module) and KOM module (comparison module) for individual section.

System is equipped by high quality overvoltage protection.

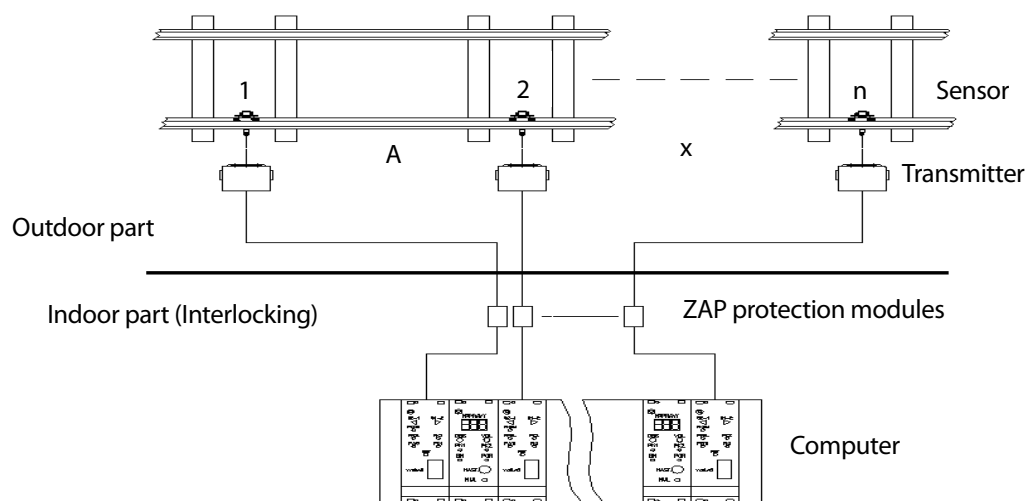


Sensor and transmitter (Counting Point)



Basic Technical Parameters

Power supply		19 to 35 V DC
PZN-1 input (given by the modular system and distances of counting points)	sensor	1 W
	transmitter	2 W (without Sensor)
	ZAP module	max. 10 W
	KOM module	max. 5 W
Max. number of counting points per section		8
Train speed		0 to 250 km/h
Wheel diameter		> 350 mm
High of flange		25 to 36 mm
Sensor-Transmitter distance		max. 10 m
Sensor-Computer distance	for power supply from computer	3 km
	for local power supply	8 km
Working temperature range	sensor	-40 to +65 °C
	transmitter	-25 to +70 °C
	computer	-25 to +70 °C



PZN-1 principle