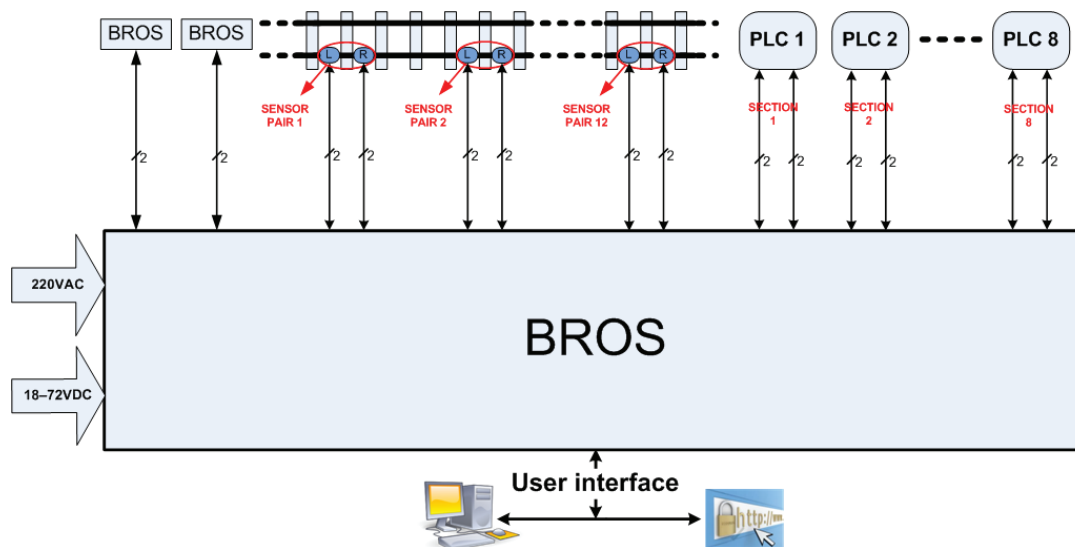


BROS

Train Axle Counter

- Control of up to 8 railway section
- Up to 12 sensor pairs can be connected directly to the BROS
- Modem communication with up to two remote axle counters
- Adjustable power supply: 18V - 72V DC or 220V AC
- Operating temperature range: - 40 °C to + 70 °C
- Reliable detection for train speed up to 300 km/h



Axle Counter BROS is used to control occupancy of the railway sections. The device is placed into a standard 19-inch 3U height rack and it is mounted inside the relay room of the railway station, automatic block system, or level crossing.

Axle Counter BROS uses sensor pairs (SP) at the end of each section and it counts in axles that have entered the section, and counts out axles that have left the section. Sensor pair consists of two sensors (wheel detectors) which are placed next to each other on the rail.

In addition to the basic function of detecting the presence or the arrival of the train wheel, sensor pair also provides detection of the direction and speed of rail vehicles.

Technical characteristics

Dimensions:

- 19" standard board rack
- 3 U height
- 84 pitch units width

Control and communication:

- Control of up to 8 railway sections
- Up to 12 sensor pairs connected directly to the axle counter
- Modem communication with up to two remote axle counters
- Two wire connection for modem communication with neighboring axle counters

Ambient conditions:

- Operating temperature: - 40 °C to + 70 °C
- Humidity: up to 100%

Power supply:

- 18V to 72V DC
- 220V AC
- Consumption up to 50W

Detection:

- Detection of the presence or the arrival of the train wheel
- Detection of the direction and speed of rail vehicles
- Detection for train speed up to 300 km/h
- Default maximum distance between the sensor pair and BROS device is 20 km for SPZ 1.4 mm cable
- On request, it is possible to deliver a solution with greater maximum distance

Key features

- Providing outputs for 8 sections and having up to 12 directly connected sensor pairs, BROS device is perfectly suitable for usage within station interlocking system, as a relatively small number of devices can control all sections of the small, medium or large railway stations.
- BROS device provides larger number of sensor inputs and relay outputs per one rack compared to competitor devices.
- In the case using BROS for controlling occupancy within ABS, only two wires in STA cable is enough for communication with adjacent axle counters.
- BROS has two modems, which enable communication with maximum two neighboring axle counters, which is important for usage within ABS.
- BROS supports all section topologies. Configuration stored in non-volatile memory provides all possible combination between sensor pairs and relay outputs.
- Additionally, direction and system information of the counting heads can be output via optocoupler.
- Design of the BROS device is based on cutting edge technology.