Single and Multi Section Axle Counter
(CENELEC SIL4 safety standard)

Reliable wheel counting with fail-safe occupancy detection. 
Medha’s Single Section Axle Counter (SSDAC) and Multi Section Axle Counter (MSDAC) overcomes track 
circuit limitations in situations including - water logging or flooding, metal bridges, long block sections, 
yards with poor wheel shunt lines, high EMI/EMC environments, tunnels, high temperature and sunshine 
regions, complex and large stations and yards etc.

- Wheel diameter range
  380mm to 1092mm

- Wheel speed
  upto 300kmph

- Sleepers:
  wood, steel, 
  concrete, composite

- Wheel sensors
  IP68 protection
  Two sensors working on 
electromagnetic field 
detection principle

- Digital Axle Counter Unit
  Supports hot swapping of cards

- Digital Axle Counter Reset Box
  Wheel counter with 4x20 dot matrix display

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**Single-section Axle Counter (SSDAC)**

- 2002 architecture
- Hot stand-by communication over diverse 
  media for higher availability

**Configurations (SSDAC)**

- One detection point – Single section (1DP-1S): 
  Typically used for sidings
- Two detection points – Single section (2DP-1S): 
  Straight line sections
- Three detection points – Single section (3DP-1S): Point zones.
- Three detection points – Two consecutive 
  sections or Auto-Section in a straight line 
  (3DP-2S/AS)

**Multi-section Axle Counter (MSDAC)**

- 2003 architecture
- Can evaluate upto 40 detection points and 
  monitor upto 39 sections
- Can cater to bigger stations or marshalling 
  yards with cascading feature

**Configurations (MSDAC)**

All configurations of SSDAC are covered in 
addition to below

- Multiple detection points - Single section: 
  Ladder
- Consecutive single sections in a straight line 
  segment and various other situations
- Complex yard/station can be configured by 
  user friendly GUI Yard Configuration Tool
Replacement of existing track circuit with digital axle counters

During station upgradation

Construction of new stations

Track length expansion

Addition of new lines

Upgradation of signaling system to computer based system

Supply package includes
- Wheel sensors
- Field units
- Central Evaluator
- Reset panel, VDU, DT and interconnecting cables

Installation
- Replacement of existing track circuit with digital axle counters
- During station upgradation
- Construction of new stations
- Track length expansion
- Addition of new lines
- Upgradation of signaling system to computer based system

Compliance to International Standards
EN 50121, EN 50126, EN 50128, EN 50129, EN 50159

- Cost effective
- Zero maintenance system
- Suitable for different types of Rail profiles
- Standalone systems, not dependent on type and make of Interlocking
- Suitable for main line, metro and high speed applications
- Web-mounted sensors for reliable operation
- Easy to install without needing any additional equipment

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