

Single Section Digital Axle Counter **SSDAC-G36**

Versatile Axle Counting System Configurable as 2DP, 3DP, 3DP-2S(IFS), AS

Overview

- G36 is a fail-safe, reliable and user-friendly 2/2 architecture based axle counting system
- RDSO approved
- Complies with RDSO/SPN/177/2012 Ver 3.0
- Certified CENELEC SIL-4 standard EN50126, 50128, 50129, 50159 Part A

Configuration

- 2DP-1S — Single Section block proving
- 3DP-1S — Point Zone working
- 3DP-2S — IBS working

Strength

- No TP circuit for push trolley with spoke wheel
- Scalable to higher configuration with same hardware and software
- Protection against wrong configuration at site

Features

- Communication using V.23 FSK modem with cable loss of 30dB
- Built-in event-logger logs up to 14000 events
- Train detection up to 250Kmph
- 24VDC working
- Protected against lightning surges
- Stable operation at -10 to 70°C and RE area

Reset

- Co-operative — Preparatory mode with piloting
- Direct — With/without Line Verification



System

- Microprocessor based fail-safe embedded system
- Detection of axles and direction of train movement
- Fixed pair communication, CRC check & unique addressing of units ensures fail-safety
- User friendly GUI aids to download events via RS232 port
- Units are housed in location boxes near the tracks

Axle Detectors

- Web mounted on track, works with 90-R, 52Kg, 60Kg rails
- Phase detection principle employed
- Signals fed at 21Khz and 25Khz to Tx coils at 60V RMS
- Axles above 550mm are detected



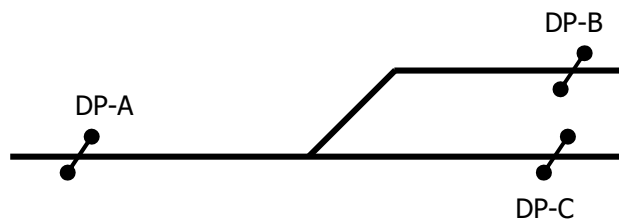
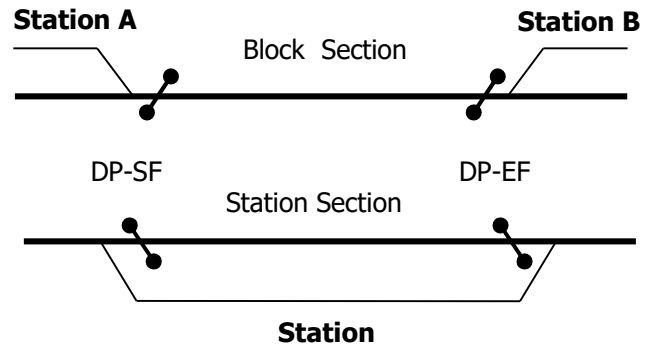
Reset Box

- Amended as per RDSO Ver 3.0 Specification
- Interactive RESET Box with LCD for live status display of
- DP Status (2DP, 3DP, 3DP-2S, AS)
- Section Status (Wait for Reset/Preparatory, Section Occupied / Clear)
- Wheel Counts (Local and Remote DP)

Configurations of SSDAC-G36

2DP Configuration

- Operation on straight lines - station or block section
- Communication using one pair quad cable
- Preparatory Reset configurable either with or without piloting
- **PR** and **VR** contacts at detection points



3DP Configuration

- Operation on point Zones / Set points
- Communication using one pair quad cable
- Detection and clearing at any points
- Preparatory Reset with **LV**
- **VR** contacts at all detection points

3DP-2S (IBS) Configuration

- Operation on two consecutive sections on a straight line (IBS configuration)
- Communication using one pair quad cable for each section
- Preparatory Reset configurable either with or without piloting
- **PR** and **VR** contacts at detection points

