

## FieldTrac 6316 Az LS

Single Section Axle Counter with integrated Evaluator

### Main Functions

- Iarnród Éireann Ireland
- TRA Taiwan
- Indian Railways India



Axle counters are vital train detection equipment which is a one-to-one alternative to track circuits. Unlike track circuits, their functioning does not depend on the ballast resistance of the track.

One FieldTrac 6316 Az LS supervised section has two or three detection points. They consist of a double rail contact mounted on the rail and an electronic unit integrated in a trackside housing. Each detection point contains a vital twin microcontroller to count the wheels passing the rail contact, determine their direction of movement, code/decode telegrams for transmission of counts to and from the other points of the section, determine the number of axles in the section, its occupancy status and to control and supervise the state of the parallel interface.

### MAIN FUNCTIONS

The FieldTrac 6316 Az LS can monitor sections independent of ballast and shunt conditions and the length of the section, and can be used in conjunction with a neighbouring Az LS or Az LM system through the use of a shared detection point.

The FieldTrac 6316 Az LS uses Thales' high performance axle counter techniques which have proved themselves in many mainline and suburban applications throughout the world. It is ideally suited for economically upgrading existing token block and semi-automatic block systems etc, providing automatic block facilities as well as for replacing existing track circuit equipment on long lines or on lines with poor ballast conditions.

## ➤ FieldTrac 6316 Az LS

Each detection point has an integrated evaluator, enabling the vital train detection information to be output directly to the interlocking/block equipment at any end of the section. This eliminates the need for a separate evaluator.

The detection points communicate with each other via an integrated modem (V.23, 1200 bits/s) using twisted pair or star quad cables or digital transmission equipment.

To ensure a high degree of safety and reliability, each transmission is sent twice and carries a secure redundancy code. All equipment comes with lightning protection and is immune to AC and DC traction currents, harmonic interference, and eddy current/electromagnetic track brakes.

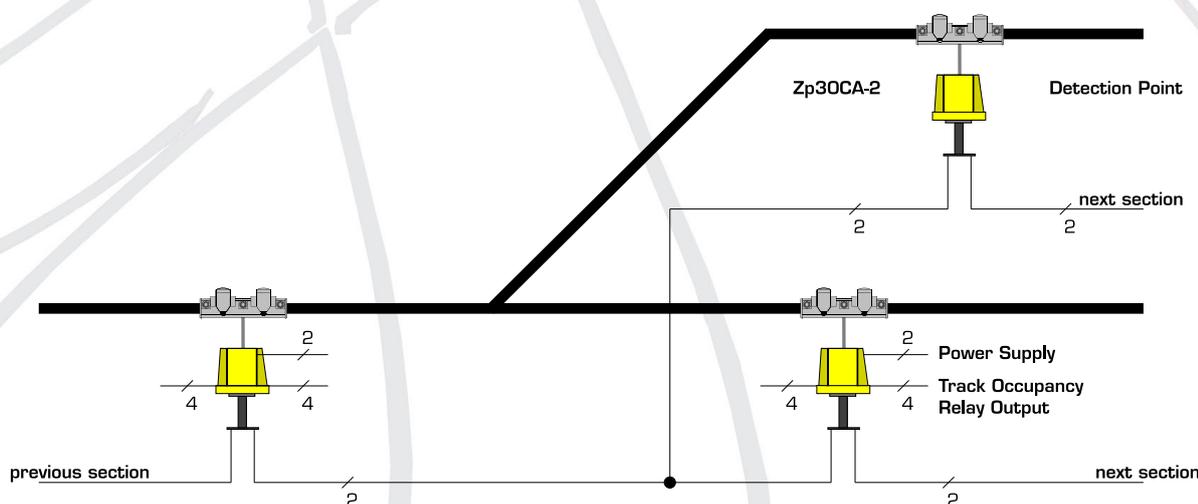
The FieldTrac 6316 monitor sections of up to 30 km in length using copper cable transmission at train speeds of up to 250 km/h (optional version for higher speeds on request) and requires virtually no maintenance (an annual inspection is sufficient to ensure reliable and safe performance).

The FieldTrac 6316 Az LS can simultaneously evaluate up to 3 detection points per section, the sections are daisy chainable.

- Automatic vital train detection
- Highly reliable transmission of axle counter information via telegrams over 2 wires

### Key Benefits

- Fault-tolerant data transmission
- Economical upgrading of existing token block and semi-automatic block systems
- Virtually maintenance free
- Very low life cycle costs
- Independence of track ballast and length of section
- Very high reliability and availability
- Excellent price/performance ratio
- No external evaluator necessary
- Track occupancy information available at each detection point
- One detection point can supervise two neighbouring sections (Az LS or Az LM)
- Plain Section (two detection points) and Point Zone (three detection points) possible
- Preparatory reset, direct reset or cooperative reset are available alternatively
- Extended data telegram address code for communication links via existing transmission systems
- Immune to eddy-current brakes
- Integrated lightning protection



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Transportation System