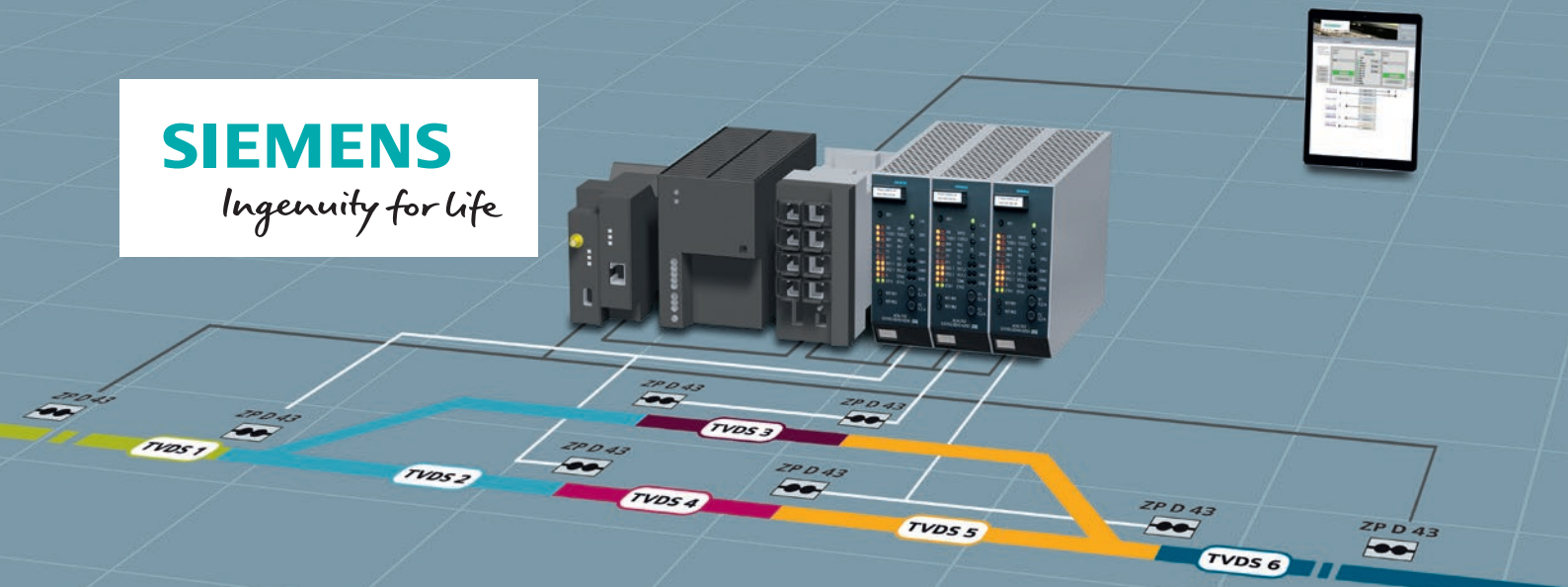


SIEMENS

Ingenuity for life



Clearguard ACM 250 axle counting system

Smart track vacancy detection for cost-effective operations

A track vacancy detection system supplies the information about whether a track in a particular section is clear or occupied, thereby permitting safe, trouble-free and efficient operations management.

The Clearguard ACM 250 axle counting system is made up of maintenance-free Clearguard ACM 250 modules which are programmed via an ID plug and combined with an Ethernet bus and Clearguard ZP 43 E/V and Clearguard ZP D 43 counting heads into a fail-safe axle counting system.

The detection equipment used meets the latest compatibility requirements for cross-border traffic in Europe.

Fields of application:

- mainline and regional railways
- metro and tramway systems
- freight lines and depots
- main lines and secondary lines, station areas, point areas
- single-track and multiple-track lines
- lines with and without blocking
- all traction types
- all common types of car
- track sections of any length
- train speeds of up to 400 km/h

Benefits

Connection to electronic interlockings (Sinet RaSTA and WNC+ interface) and relay interlockings

HTML communication for configuration, logging and diagnostics

Modular, compact hardware

Deployment of Clearguard ZP D 43 and Clearguard ZP 43 E/V counting heads





1



2



3



4



5

Technical data

Counting capacity	2,000 axles per track vacancy detection section 20 axles per second for the Clearguard ZP D 43 and Clearguard ZP 43 E counting heads
Max. number of connectable wheel detectors per ACM	Two counting heads: Clearguard ZP 43 E/V and Clearguard ZP D 43
Max. number of detectable track vacancy detection sections per ACM	2
Power consumption	Clearguard ZP D 43: 5 W Clearguard ACM 250: 12 W
ACM supply voltage	24 V DC (21.6 V to 31.2 V DC), approx. 1 A
Outputs	
Ethernet connections	Sinet RaSTA (Rail Safe Transport Application) Standard interface to Trackguard Simis W/D
WNC+	Standard interface to the Trackguard Westlock and Trackguard Westrace families of interlockings
Relay contacts for DC Switching voltage	10 V DC to 72 V DC 10 V AC to 150 V AC
Switching current	2 mA DC to 0.25 A DC 2 mA AC to 1 A AC
Switching power	15 W
Relay contacts for AC Switching voltage	24 V AC (-10 %) to 110 V AC (+10 %)
Switching current	2 mA to 1 A
Switching power	15 W
Inputs	
Voltage range	21.6 V DC to 72 V DC (max. 6 mA)
Current range	up to 6 mA at 21.6 V DC to 72 V DC (with series resistor limited to 6 mA)
Operating conditions	-40 °C to +70 °C

- 1 Clearguard ACM 250
- 2 Power transformer
- 3 Ethernet-switch
- 4 Router
- 5 Clearguard ZP D 43 (DEK 43) with trackside connection box

Published by Siemens AG 2016

Mobility Division
Otto-Hahn-Ring 6
81739 Munich
Germany

© Siemens AG 2016

Article No. MOMM-B10147-00-7600
Printed in Germany
Dispo 01000
PPG330 BR 09161.0

siemens.com/mobility

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

Clearguard® is a registered trademark of Siemens AG. Any unauthorized use is prohibited. All other designations in this document may represent trademarks whose use by third parties for their own purposes may violate the proprietary rights of the owner.