

TrainSWing REA-11

Radio Block Centre for ERTMS/ETCS (system version 1.1)

- Failsafe and reliable system meeting SIL4 requirements according to CENELEC
- Interoperability constituent according to TSI CCS
- ETCS L2 function meeting ERTMS / ETCS specifications
- High reliability and availability
- Control core architecture 2003, HMI computer architecture 2x 2002
- Architecture 1002 for communication, diagnostics and supportive functions
- Modular structure of communication units (ETHERNET IPX, TCP / IP, UDP / IP; ISDN, ...)
- Effective and tailor made solution for specific requirements of Infrastructure Managers
- Local and remote diagnostics centralised to DiagSWing LDS-3



GENERAL DESCRIPTION

TrainSWing REA-11 (further REA-11) is the radio block centre designed for fail safe supervision of trains equipped with ETCS within ERTMS/ETCS L2 projects and on lines where station interlocking and/or line signalling system with data interface is installed.

REA-11 implements relevant ETCS functions in compliance with 3rd set of specifications (baseline 3, release 2) according to Regulation of (EU) Commission 2016/919 on technical specification for interoperability of "Control command and Signalling" subsystems in the European Union (TSI CCS).

BASIC TECHNICAL DESCRIPTION

- REA-11 consists of 2 main parts:
- RBC core (RBCC) HW and SW components having implemented ETCS functionalities and communication with adjacent systems (IXL, OBU, adjacent RBC)
- RBC commanding workplace (HMI RBC) – enables commanding and indication of ETCS trackside and OBU

RBCC works in 2003 architecture and provides all safety-critical functions. RBCC processes safety-relevant layers of Euroradio protocol for OBU, SAI/ ESL/ALE for adjacent RBC and protected ETMNET+ for IXL and HMI. HMI REA-11 contains 3 types of operator's workplaces for:

- Maintenance dispatcher provides complete set of ETCS commands and indications
- ETCS dispatcher provides set of ETCS commands and indications for operation of one or more RBCs
- Line dispatcher united workplace for centralised traffic control via TrafficSWing DOZ-1 and operation of one or more RBCs

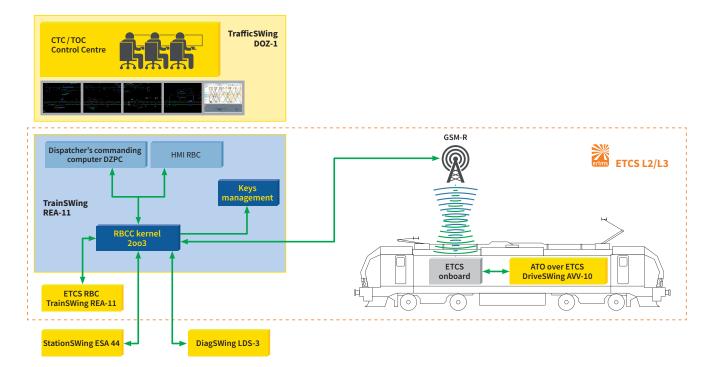




BASIC TECHNICAL PARAMETERS

| Supply voltage (Panel RBCC & ISDN/GNA) | AC 230 V ± 10 %, 50 Hz; DC 24 V ± 20 % |
|--|---|
| Temperature range | climatic category T1 according to EN 50 125-3 |
| Humidity | 5 % to 95 % |
| EMC compliance | EN 50121-4, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, |
| | EN 61000-4-6, EN 61000-6-4 |
| Service life | minimum 25 years |







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The information provided in this document contains a general description and characteristics of the device/product, which may change during its own development based on specific customer requirements. The required specific parameters of the product are binding only on the basis of a concluded contract.