



***Intelligent Transport
Critical Communication
Emergency & Security***



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TRS2090

CCU2130 - TRAIN RADIO SYSTEM TRS2090 TETRA / ANALOG-DMR / P25 / 5G-MCX



With the TRS2090, ErvoCom has succeeded in developing a unique and modular train radio system that meets the high technical requirements of GSM-R and at the same time offers significant cost savings. The comprehensive train solution offers customers the possibility to connect different sub systems such as passenger information system (PA & PIS) or Intercom system (emergency telephone station) and is available in different radio technologies.



Figure: Central Control Unit ZSE2130, IP20 as 19" Rack

TRS2090 is a digital train radio system (provided based TETRA, Analog/DMR, NXDN and LTE (MCX)), which sets a new standard in the modern Railway communications industry. During the development special attention was drawn to the fact to have as many GSM-R like functionalities as possible in order to be able to offer an excellent alternative to the European GSM-R standard. The great advantage for railway customers is to obtain a similar high-end technical product at a much more reasonable price level. In comparison to GSM-R infrastructures the implementation as well as the operation of TETRA- or DMR- infrastructures is much cheaper for finally getting similar railway network functionalities.

Besides the usual important GSM-R typical functionalities the train radio system often contains other individual customer specific railway applications and functionalities as well as menu structures for the daily operational business, which are subject to detailed technical specification between ErvoCom International and the client prior to a project rollout. This is efficiently possible thanks to the modular system concept of TRS2090. Additionally to the standard functionalities like voice communication the TRS2090 provides further railway specific features, e.g. emergency call, call preemption according to priorities, passenger announcements into the train, text messaging (SDS), functional registration, train running number based calls and more.

Depending on the individual project requirements the TRS2090 system consists of a combination of a central controller unit (ZSE2130) in conjunction to one or two remotely connected human machine interfaces (CoCo2137/CoCo2167/CoCo2177).

The following basic functionalities are provided:

- Voice communication with transmission and reception of text messages
- Data communication from/to on-board computer systems
- Emergency communication
- Creation of dynamic groups for specific scenarios
- Passenger announcements into the train (train driver initiated call or dispatcher initiated call)
- Possibility of interconnection to passenger i...

Advantages

- Lower infrastructure costs in comparison to GSM-R
- Modular expandable system concept
- Various housings of the central controller unit ZSE2130 (19" rack, compact version)
- Certified according EN50155 (3rd party certified)
- Fire protection according EN45545-2 (3rd party certified)
- COCO2137 and ZSE2130 available as IP65
- Central communications platform for other on-board systems such as PA, PIS or IC
- Cabin-to-Cabin direct call for shunting
- Train running number based call (Functional Addressing)
- Separate emergency call button
- Sensor for automatic brightness adjustment for display- and keypad



Contact

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