

# Communication Devices for Railway Applications

Products for use in rail transport



## We ensure communic

## High-quality Communication Solutions »Made in Germany«

Development, production and distribution - all from one source

- Many years of experience and continuous optimization
- Certified workflows, applied consistently



QUALITY COMMUNICATION

#### About us

pei tel Communications GmbH, based in the city of Teltow, near Berlin, has reinvented itself time and again. Launched in 1991 as a sales and distribution company for the peiker technology group, we are a full-spectrum provider of comprehensive communication solutions.

From now on, the product range is divided into the areas of Broadband Solutions, Professional Radio Technology, Mobile and Indoor Radio Technology as well as Professional Audio Accessories. We develop, produce and sell high-quality communication solutions, such as various types of microphones, handsets, loudspeakers and desktop microphones.

Communication solutions used in rail transport must meet particularly stringent requirements. Our products are extensively tested and offer performance features far above the required standards.

Especially for rail transport the following products are certified according to DIN EN 50155 certified:

- HA10 EVO Handset
- HA11 EVO Handset
- HA40 Handset
- HA57 EVO Handset

- TM660 type Microphone Head and Gooseneck Microphones
- · ME8 Hands-free Microphone
- · DD113 Hand Microphone



### Original equipment manufacturer for well-known manufacturers



Together with various manufacturers of train radio systems we develop solutions specially tailored to the user.

Under difficult environmental conditions, such as in rail transport, robust communication solutions with excellent acoustic properties are indispensable. Already during the development of our products, we attach great importance to compliance with the legal requirements. This enables us to guarantee safe operation in the rail sector.

Our communication solutions are already being used by well-known manufacturers such as Funkwerk and Siemens/Stadler.



#### DIN EN 45545-2

#### Fire Behavior

Our products meet the highest fire protection requirements. These have been tested by means of several procedures on the basis of requirement profiles, hazard levels and limit values to be complied with. Various tests confirm the resistance even at extreme temperatures.

#### **DIN EN 60068**

#### Environmental Conditions (temperature, climate)

Due to their sophisticated design, our products can withstand our products withstand even adverse environmental conditions. This ensures high functionality and a long service life. Extensive tests and certification according to DIN EN 60068 confirm this. This ensures a high level of safety of speech intelligibility in rail transport!

#### Electromagnetic Compatibility (EMC)

In rail transport, numerous electrical and electronic devices come into contact with each other. These could cause interference with each other. Our products are certified according to DIN EN 50121-3-2 which ensures electromagnetic compatibility and thus protects against interference emission.

#### Shock and vibration tests

Voice connections in rail transport are essential and must not fail even under mechanical stresses such as vibration and shock conditions. Our products have been proven to be resilient and to withstand the vibration and shock tests tested in accordance with DIN EN 61373.

#### **DIN EN 61373**

**DIN EN 50121-3-2** 

### Our principles of the quality management system:

- Continuous improvement of existing processes
- Efficient implementation of needs regarding processes
- Inspection/review of product quality
- · Corresponds and complies to DIN EN ISO 9001

## So that communication does not fall by the wayside

All components are perfectly matched

- · Wide range of communication products
- · Perfect for operations on the platform and in the rail vehicle



#### Durable and robust

Our handsets are extremely robust and ergonomically designed. Haptics is also taken into account in the development of the components.

- · Durable and halogen-free spiral cord
- Large push-to-talk (PTT) button, suitable for left-handed and right-handed users.
- · With hook-switch mechanism in the cradle



#### **Excellent Communication**

Years of experience in radio and voice transmission have shaped the audio quality of our products. Even under adverse environmental conditions announcements are transmitted and reproduced clearly and distinctly.

 We offer a wide range of a wide product portfolio to cover almost every application in rail transport. These include gooseneck, hand/-free microphones and different handsets.



#### Found nothing suitable?

We help you individually

- Custom modifications and extensions
- Creation of a suitable product for your application
- · Conception and development of individual solutions

Feel free to contact us! Tel. +49 3328 9363-280

#### Overview of the product portfolio

Selected products from our portfolio, other products on request..

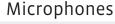
#### Handsets for the Rail Sector

#### **HA10 EVO Handset**

Artical Number: 6510-002-003-51

Handset with thumb guard, one button and cradle

- · Handset with spiral cord and cradle
- Large PTT button on the underside
- Connect via 12-pole terminal block in cradle
- Dynamic microphone and ear capsules
- · Cradle with release buttons





#### TM660 Microphone Head

Artical Number: 6114-001-100-03

Dynamic microphone head

- Dynamic microphone capsule
- · Directivity: Cardioid
- Chromed housing
- Designed for gooseneck mounting (Ø 11 mm, 15 mm and 18 mm)
- · Also available as gooseneck microphone



#### **HA11 EVO Handset**

Artical Number: 6511-002-002-51

Handset with one button and cradle

- · Handset with spiral cord and cradle
- Large PTT button on the underside
- Connect via 12-pole terminal block in cradle
- · Dynamic microphone and ear capsules
- · Cradle with release buttons



#### ME8 Hands-free Microphone

Artical Number: 6904-001-000-51

Electret built-in microphone

- · Electret microphone capsule
- Built-in microphone
- · Dimensionally stable plastic housing
- · Integrated preamplifier
- Easy mounting due to thin cable and round design



#### HA40 Handset

Artical Number: 6540-002-100-51

PTT button, emergency button on the side

- Protection class: IP66
- Transflective colour display (2.0 inch)
- Wide operating voltage range (5 V to 32 V)
- 32-bit microcontroller
- Dynamic speaker capsule and electret microphone, Headphone port and loudspeaker
- · Fonts for different languages



#### **DD113 Hand Microphone**

Artical Number: 6209-001-000-03 Waterproof hand microphone with three buttons

- Waterproof: IP6K7
- Dynamic microphone capsule
- Rugged chrome housing
- Durable spiral cord
- Protection against unintentional button presses
- Extremely durable switching contacts



#### **HA57 EVO Handset**

Artical Number: 6508-008-100-51

PTT button on the underside

- Protection class: IP40
- Large operating voltage range (5 V to 32 V)
- · 2.4 inch colour graphic display
- Large PTT button on the underside (easy handling for right and left-handed users)
- 32-bit microcontroller



Other products or individual solutions on request!

Please contact us also for other accessories
We are at your disposal at any time!

Tel. +49 3328 9363-280

### Railway standard

Certification according to DIN 50155: Electronic equipment on railway vehicles

- DIN EN 45545-2 defines requirements with regard to fire behavior
- DIN EN 50121-3-2 ensures electromagnetic compatibility
- DIN EN 60068 verify the stability of products under adverse environmental conditions
- DIN EN 61373 ensures the resistance to shocks and vibrations according to international standard



### Successful Characteristics of our Products

We ensure communication

#### **Product range**

- · Meets legal railway standards
- · Robust and high quality
- · Durable and economically efficient

#### Handsets

- · First-class audio quality with noise cancelling
- Comfortable use of PTT button for right- and left-handed users
- · Excellent haptics and handy design
- · Valuable coiled cable

#### Microphones

- High quality audio with noise compensation
- · Comfortable and easy to use

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