

# Railway SIP VOIP Handset

## Overview

The Ermetris VOIP Railway Handset has been developed and manufactured with the aim to create a device that meets the demanding standards required in the railway field. Low profile: the handset's reduced depth facilitates its assembling within electrical wall cabinets with doors.

Magnetic fastening to the cradle: the lack of release buttons allows the handset to be easily used also without specific instructions or prior knowledge and experience. Rugged and easy to install: the handset is built with robust materials and all parts are secured with screws.

The cradle does not need to be disassembled to be fastened to the supporting panel.

Excellent sound quality: the transducers and their position within the handset have been carefully selected in order to obtain maximum audio performance.

Various options available: it is not one single product but a range of products.

In fact, the handset can be customised according to different needs and it can be equipped with either a dynamic or electret microphone, with different types of connectors, and with a speaker in the cradle.

Thanks to the SIP standard VOIP communication the

customer can have a ready to use device with no need of software development. The VOIP Railway Handset has also the option to be a simple SIP server and not only client.

## General Features

- > Operating temperature: T3 class of EN 50155
- > Dimensions with cradle: 63 (W) x 202 (H) x 61 (D) mm
- > Fastening holes: 4,2 mm
- > Distance between fastening holes: 171 mm
- > Weight: 400 g
- > M12 D code connector, M12 A code pin connector for power
- > 24 VDC nominal power input compliant with EN50155
- > 2,4" touch display
- > WiFi 802.11a/b/g functionality (optional)

## VOIP Features

- > SIP standard communication (client an function) or custom audio protocol

## Microphone (electret condenser)

- > Sensitivity: -46 dB ( $\pm 3$  dB) at 1kHz, 0dB=1V/Pa
- > Frequency response: 100 Hz to 10 kHz, Directivity: omnidirectional
- > Operating voltage: 2 V (max. 10 V), Impedance: 2.2 k $\Omega$  at 1 kHz

## Earphone (dynamic)

- > Efficiency: 100 dB at 1 kHz ( $\pm 2$  dB), Frequency response: 200 Hz  $\div$  5 kHz
- > Impedance: 300 ohm ( $\pm 15\%$ ) at 1 kHz

## PTT Switch

- > Current: 100 mA max, Contact resistance: < 1 ohm, Electrical life: > 100.000 cycles
- > Activation pressure: 240 g, Pushbutton colour: RAL 2008

## Hook Switch

- > Reed-switch with change-over contact, Voltage: 100 Vdc max, Current: 0.3 A max

## Compliance

- > EN 50155 for Railway applications
- > EN 61373 Random Vibration & Shock Testing
- > EN 50121 Railway applications. Electromagnetic compatibility
- > EN45545 Fire and smoke

## Order Code

- > PH-1000-00 , SIP VOIP Handset with M12D and M12 A code power input 24 VDC, with LCD touch
- > PH-1000-01, Ermetris Audio protocol Handset with M12D and M12 A code power input 24 VDC, with LCD

