

UIC558 MULTITESTER

TPV18-1K

MultiTester **TPV18-1K** is a modern service device designed for inspection and testing of 18-wire¹⁾ continuous UIC cable, as well as for complex diagnostics of systems connected to this line according to UIC Leaflet 558.

Device description

The device is installed in robust, but light plastic suitcase (water, impact and dust-proof). It consists of several functionally separate parts:

- **Test of functionality and integrity of UIC line, control of door and lighting.**
- **Test of the electro-pneumatic brake system (EPB) and emergency brake override (EBO).**
- **Test of Public Address System (PAS)**, whereby installed diagnostic facility simulates service, carriage and locomotive radio centres (PAS Units). Through the audio input, it is possible to send any audio source (sin. signal, noise, ...) into the program channel.

It is also possible, through the wireless **Bluetooth®** connection, to send a generated noise, sinusoidal signal or any record (music) to the train set by means of a mobile application.

On the front panel, the 18-pole socket is installed. Through this socket, the tester is connected to the diagnostic cables in the UIC line of the train. During testing of the line for interruption and for correct connection, the measuring head (part of the accessories) is gradually connected to all UIC connectors of the carriage, train respectively. The tester enables several hours long operation by using supply from its own installed battery, or by using an adapter from 230V network. On the control panel of the tester, the controllers are divided into the functional groups for a simple orientation of a user during diagnostics.

By using of the **TPV18-1K** tester, it is possible to diagnose the UIC line of the **whole train** and systems connected to it **with one device**, and all these tests can be performed by one person.

Introduction of the TPV18-1K tester will bring a significant reduction of time necessary for testing of all functions of the carriage, or the whole train, related to application of the continuous line of the carriage.



TPV18-1K tester enables:

- **Galvanic testing of the 18-wire continuous information UIC line**
 - for short-circuit (between wires, or against the frame),
 - for interruptions
 - for correct connection,
 - for insulation resistance between pairs and pairs against the frame.
- **Testing of functions and devices of vehicle or train set controlled by the continuous cable:**
 - Door control (central closing, selective door unlocking)
 - Turning lighting on and off
 - Test of the electro-pneumatic brake system (EPB) and emergency brake override (DB, ÖBB)
 - Sound distribution of the carriage by a built in "gong" signal, by connecting of the signal source to a 3.5 mm "jack" connector or by wire-less **Bluetooth®**
 - PAS centre (tester works as a source and receiver of signals imitating other carriages and a locomotive) according to UIC558,568.

¹⁾ Optionally, it is possible to test also 13-wire UIC cable (less used today) – see optional equipment

Technical parameters

- Supply from installed battery DC 14.8V
- Charging adapter AC 230V/50Hz
- Incoming power max. 25 VA
- Suitcase dimensions 470 x 330 x 175 mm

Accessories:

- Supply / charging source
- 18-pole testing cable
- Measuring head
- Operational instructions

Optional accessories:

- 13-pole testing cable
- Modified head for testing of 18- and 13- wire cable