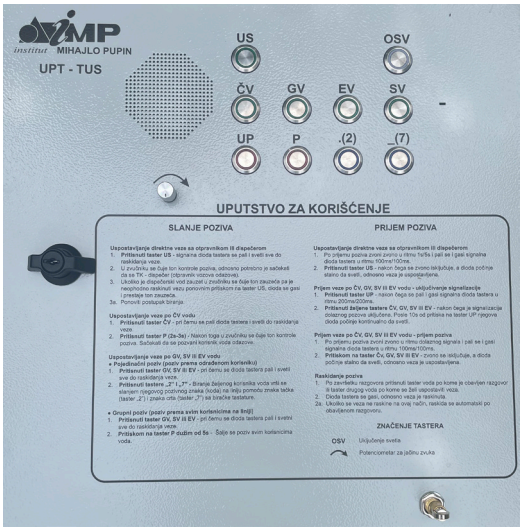
UNIVERSAL RAILWAY TELEPHONE (UPT)

- Universal UPT device for all purposes, that is connections used in railway infrastructure
  - Telephone at exit signals (TIS)
  - Telephone at entry signals (TUS)
  - Telephone for the needs of APB and spatial signals (TAPB)
  - Telephone on railway sections (PT)
  - Telephone on platforms and shunting stations - (CB)
- Adjustable power supply AC/DC
- Small dimensions of the device, which facilitates assembly and disassembly
- Extremly low energy consumption
- Possibility of operation via optical and copper cable
- Upgradeable for use in GSMR, TETRA, RDV, etc.



All versions of the "UPT" are in a unique cabinet that is made in an anti-vandal version and the design corresponds to the existing appearance and dimensions that have been in use on the railway tracks.

The speaking part is realized through combinations of microphones and speakers for work with manual adjustment of the the volume of the speakers on the front panel and through circuits that have the funcionality of a standard analog telephone.

Key features

The UPT is connected to different LB and CB lines via a translator for galvanic isolation, and the connection to the access cables is made via key terminals.

Power supply is possible via direct voltage DC (20V - 72V) or in special cases even UPT can use input voltage or AC (220V).

Switches with built-in light indicators are used for connection establishment and line management instaed of physical switches.

A switch is installed on the door, which has the function of automatically switching on all lines when the door is closed.
The manipulative part is made in the hands-free version, but for the appropriate needs, the variant with the handset can be easily used.

Technical and mechanical characteristics

Mechanical

- Dimensions: 470mm x 541mm x 345mm
- Weight: 32kg
- Level of protection: IP54 even if with open cabinet door
- Maximum number of introductions: 6
- Type of electrical connection: PG13.5 and PG19

Technical

- UPT device uses external power supply:
  - [+20, +72] VDC,
  - [+9, +150] VDC in special case,
  - 220 VAC in special case.
- Maximum power consumption is 5W.
- Power consumption in idle state is 2.5W.
- Operating temperature range is [-40, +85] °C.
- Electrical protection:
  - Galvanic isolation, integrated thermal, overcurrent, overvoltage protection
- Grounding: Through the housing and mounting screws.
- Communication interface: Optical, duplex, single mode, 1310nm, connector SC UPC
- Range from the station: Maximum 20km
- End optical box (ZOK): Grommets for 3 cables, 8 positions for splicing and output for 8 fibers.

Other characteristics

- The design of the UPT is such that it can be instaled in the plasec where the existing ones were phones that are already in use without any structural changes.
- Increased reliabillity and longetivity by using components of newer technology.
- The UPT is a compact device, usable for several types of phones, so handling is a breeye assembly, and/or during maintenance is simple and does not require major works or application.
- During assembly, only basic tools are used (set keys and screwdrivers), as well as a minimum amount of consumables.

institut MIHAJLO PUPIN

Institut Mihajlo Pupin
Phone: +381 11 6772 860
Fax: +381 11 6772 755

Volgina 15,
11060 Belgrade, Serbia
info@pupin.rs