

# m2SCD

- Implementation of railway signal interlocking (impossible to set another entrance route until the one already set is cleared)
- Implementation of traffic control with multiple entrance routes
- Providing power supply for announcing signals
- Signaling and control from independent control panel
- Symbols on control panel are in accordance with regulations of Serbian Railway<sup>1</sup>
- Counter of entrances, independent counter for each
  entrance route
- Switch for forceful clearing of set entrance route
- Independent counter for forceful clearing of set entrance route
- Battery powered autonomy



**MINI MOBILE SIGNAL CONTROL DEVICE** 



### **Brief technical description**

Primary function of m2SCD device is implementation of temporary railway signal interlocking on four or more routes.

Basic configuration of the device supports control and driving of four signal lights and four announcing signals.

Device can be configured to control lower number of entrance routes or expansion for greater number of routes. In that case all descriptions can be expanded on additional entrance routes.

Complete equipment is placed in standard 19" industrial rack enclosure. Complete device consists of: batteries, battery charger, inverter for signal power supply, axle sensors and logic for signal interlocking and entrance route enabling and clearing.

Control panel is used to set and clear entrance route and to display signal, sensor and system state. Control panel is freely movable and can be placed in the cabinet or on the appropriate traffic control desk independently from the rack enclosure (this has to be defined in project documentation).

### **Primary application**

Implementation of temporaty railway signal interlocking in case where primary safety and signaling equipment is disabled or lacking eg. during modernization of primary safety and signaling equipment.

<sup>1</sup>Device can be configured in accordance with different regulation or according to project

## **Technical characteristics**

| • | Power supply:                 | 230VAC <sup>2</sup> |
|---|-------------------------------|---------------------|
| • | Working voltages:             | 230VAC              |
|   |                               | 175VAC              |
|   |                               | 24VDC               |
|   |                               | 12VDC               |
|   |                               | 5VDC                |
| • | Number of signals:            | 4 <sup>3</sup>      |
| • | Number of announcing signals: | 4 <sup>3</sup>      |
| • | No of workplaces:             | 1                   |
| • | Power consumption:            | <500VA <sup>4</sup> |
| • | Autonomy:                     | >8h <sup>5</sup>    |
|   |                               |                     |

Connection for external equipment: terminal block

<sup>4</sup> Basic configuration without railroad switch lighting

<sup>5</sup> Greater autonomy possible on demand





#### www.pupin.rs

Institute Mihailo Pupin Phone: +381 11 6772 860 11060 Beograd, Serbia

Volgina 15,



<sup>&</sup>lt;sup>2</sup> Implementation for different power supply or redundant power supply possible

<sup>&</sup>lt;sup>3</sup> Possible control of more than (or less than) four entrance routes preset in default implementation