

#### AREA OF APPLICATION

- MAPS: the system is designed for guarded and nonguarded level and pedestrian crossings on railway lines with any traffic intensity and train spacing systems.
- MAPS-M: non-relay system designed for non-guarded level-crossings at single- and double-track lines, fitted with any type of train spacing systems.
- Increasing of train and car traffic safety at level-crossings, as well as the safety of pedestrians at pedestrian-crossings.
- Reduction of time and labour required for level-crossing construction.
- Reduction of running costs due to reduced quantity of relays and absence of track circuits.
- Improvement of work environment for maintenance personnel due to in-built diagnostic and event logging systems.
- Depending on level-crossing conditions, the system equipment can be housed in a stationary building, a relay cabinet or MKM Mobile Equipment Container.



### **ALREADY FITTED**83 LEVEL-CROSSINGS

## **5 COUNTRIES**

TEMPERATURE RANGE
-60...+85°C

# SIMPLE INTEGRATION

#### RELIABILITY AND SAFETY

Recommended for application on **Russian Railways** 

**High reliability** even at failure of 2 counting posts

**Protection** against lightning and surge overvoltages

Award of Russian Railways for quality of complex technical equipment

#### **USER ADVANTAGES**



In-built diagnostics, event logging.



Factory ready solution.



Easy to install, low maintenance system.



User-friendly interface of MAPS-M indication panel.



ULIS MAPS Lab Set is available for personnel training.



#### **CCTV CAPABILITY**



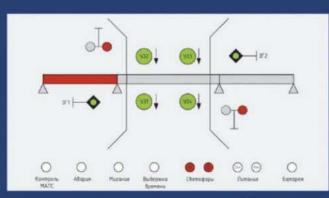
Increased traffic safety.



Recording of events on level-crossing and watchman's actions.



Reliable evidence base.





14:18:25 проезд на запрещающий сигнал светофора гос. номер К1008К196
14:18:22 проезд на запрещающий сигнал светофора гос. номер К3000М96
14:18:20 проезд на запрещающий сигнал светофора гос. номер К3000М96
14:18:18 переездная сигнализация включена
14:18:18 зацетие участка извещающия

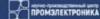
14:18:18 переездная сигнализация включена
14:18:18 занятие участка извещения
14:05:54 освобождение участка удаления
14:04:49 шлагбаумы в вертикальном положении
14:04:49 переездная сигнализация выключена
14:04:40 УЗП оттущены
14:04:37 потеря контроля УЗП
14:04:28 занятие участка удаления
14:04:18 освобождение эоны переезда
14:04:18 освобождение участка извещения
14:04:18 освобождение участка извещения
14:04:09 занятие зоны переезда
14:03:24 УЗП подняты
14:03:20 потеря контроля УЗП







ремя: 2018-07-25 14:18:26:01 : N59:880707 E29:904118 д ПК 160200 г. Екатеринбург, ул. Примерная, 99



**EQUIPMENT OF PEDESTRIAN-CROSSINGS** 

Pedestrian-crossings can be arranged both on single and multitrack sections with and without track circuits.

ESSO-M Axle Counting System is used to control pedestriancrossing signalling equipment if a section is equipped with the track circuits. In case there are no track circuits, MAPS Automatic Level-Crossing Control System is used.

MAPS and ESSO-M systems use wheel sensors to detect vacancy/occupancy of track sections. Boundaries of a section are fitted with counting posts, which are connected to the indoor equipment of the systems.

#### MAPS, MAPS-M COST-EFFICIENCY

