



SmartSwitch

System for Local & Remote Point Control



- Economical solution for fail-safe operations of small numbers of points (typically 1 – 15)
- Remote point control using wireless communication
- The possibility of operation based on automatic determination of running direction
- Reduced physical exertion and increased safety of workers within the rail yard
- Excellent reliability
- Top diagnostics
- The highest fail-safety level SIL4 according to the European standards of CENELEC
- The possibility of gradual implementation with cost distribution over time

První**Signální**



SmartSwitch is a fail-safe system for both local and remote point operation.

The equipment may be used both for industrial sidings, and regional and tram lines. It is advantageous to install it in railway or tram depots.

The wireless remote control minimizes for persons the necessity to move in the tracks and getting in & out of the locomotive as the most frequent accidents occur in such cases according to some studies.

The solution enables to remove heavy physical work and accelerates cargo transportation.

SmartSwitch enables to provide optimum economical solutions for specific needs without compromises in quality or safety.

GENERAL DESCRIPTION

BASIC TECHNICAL DESCRIPTION

- The SmartSwitch system is based on a unified HW & SW platform of the safe NEXUS PLC.
- It meets the European standards for control system safety at the highest level SIL4.
- Interfaces to outdoor controlled elements consist of fully electronic converters.
- Flexible architecture and modular structure enable to build up a control system able to control a group of points (typically up to 15 pc), or signal devices.
- The system co-operates with point machines driven by hydraulics or by electric motors.
- Point positions are indicated using omnidirectional three-light unit.
- The equipment may be optionally equipped with means for occupancy detection and with means for remote control. The system can be controlled with local operation pushbuttons, or with the locomotive terminal, or with the locomotive remote control, DTMF radio, or a handheld, or a Smartphone.
- All the traffic and diagnostic data are recorded and archived. Subsequently data can be played-back and further processed.
- The system has available top diagnostics for easy detection and localization of possible failures.
- Maximum accent is put on failure prevention using timely detection.

BASIC TECHNICAL PARAMETERS

Max. number of controlled points **approx. 15**

Max. distance of the controlled point machine **approx. 200 m**

Max. distance of the remote control unit **unlimited**

Occupancy detection **axle counter, track circuit**

Remote control **DTMF radio, handheld / Smartphone, on-board terminal**

Remote diagnostics **yes (SMS)**

