AT-SIGNAL

COMPUTER-BASED INTERLOCKING
SYSTEM «SIGNAL»

AT-SIGNAL

COMPUTER-BASED INTERLOCKING SYSTEM «SIGNAL» CBI-S

Computer based interlocking system «SIGNAL» (CBI-S) with integrated functions of semi-automatic and automatic interlocking — is a safe, reliable and cost-effective microprocessor-based interlocking system designed on serially produced programmable logic controllers (PLC).

Such controllers have been widely used in the CBI-S of many countries of the world for a long time, allowing them to significantly increase economic efficiency, simplify development and design, and solve the obsolescence problem of microelectronic components.

System advantages:

- ✓ Based on serially produced programmable logic controllers
- ✓ Modular design & Flexible architecture
- ✓ Software based on IEC 61131 standard
- ✓ Safe digital interface protocols
- ✓ External communication (RS485 and/or Ethernet)
- ✓ Advanced diagnostics
- ✓ Low operation and maintenance costs
- ✓ System stability when switching power supply feeders
- ✓ Off-line operation from uninterruptible power supply source

AT-SIGNAL

COMPUTER-BASED INTERLOCKING SYSTEM «SIGNAL» CBI-S

Structure of CBI-S «SIGNAL» :

☐ **Operational control level.** Workstations of the station attendant and technician are equipped with industrial computers and allow both local and remote control

☐ **Interlocking level controllers** to execute interlocking logic, check safety conditions and generate control commands to wayside equipment

☐ **Object controller level** covers the controllers for direct control and monitoring of wayside equipment

Key benefits of CBI-S :

☐ High economic efficiency — the system is built on programmable logic controllers, mass-produced in large batches and widely used in various industries

☐ Common usage of standard components — guarantee of investment protection, technological independence and long-term technical support

☐ Flexibility of CBI-S configuration — the optimum level of safety and reliability of functions and components necessary for the customer

COMPUTER-BASED INTERLOCKING SYSTEM «SIGNAL» CBI-S

Key benefits of CBI-S :

❑ Standard development and design tools — standard programming languages used for application software development ensure compatibility with components from different manufacturers and customer ability to independently make changes in the software if it is necessary to reconfigure the station

STANDARD COMPLIANCE:

Ukrainian standards: DSTU 4151; DSTU 4178 (level FB- 4)

Technical Regulation of the Customs Union: TP TC 003/2011

European standards:

❑ EN50126 – Railway applications – The specification and demonstration of dependability, reliability, availability, maintainability and safety (RAMS)

❑ EN50128 – Railway applications – Communications, signalling and processing systems – Software for railway control and protection systems

❑ EN50129 – Railway applications – Communications, signalling and processing systems – Safety related electronic systems for signalling. Safety Integrity Level (CENELEC) SIL4.

❑ EN50159 – Railway applications – Communication, signalling and processing systems – Safety-related communication in transmission systems

SCAN ME

Address:
Ukraine, 61001, Kharkiv,
Plekhanivska str, 16

Tel. +38 (057)-780-15-20
E-mail: info@atsignal.com.ua