ElectroLogIXS® XP4

Crossing Controller

The ElectroLogIXS® family of wayside electronics from KB Signaling is designed to simplify the way you control your railroad. The ElectroLogIXS XP4 combines the benefits of years of crossing experience, with the modern capabilities of the ElectroLogIXS platform, to deliver a state-of-the-art crossing solution.

For grade crossings train detection and warning device control, the ElectroLogIXS platform can be populated with the grade crossing track prediction module (XTI-1S), the gate, lamp, and bell control module (IXC-20S+), and one of KB Signaling's Vital I/O modules to create an ElectroLogIXS XP4 configuration.

KB SIGNALING™

ElectroLogIXS® XP4 Crossing Controller

Key Benefits

- Scalable
- Motion or constant warning modes available
- Integrated crossing controller
- Ethernet processor
- Vital communications

Customer Benefits

Flexible

Units can easily be populated to control diverse locations by adding particular application modules in the chassis.
Ten different application modules and 5 different system modules are available. Multiple application modules of the same type can be added to reach the capacity required. Redundancy is easily achieved by adding backup modules to the system.

Industry Standard Communications

The VPM-3 Ethernet processor allows the user to access, download, set up and diagnose a chassis with a standard web browser. This can be done locally or through a standard IP network. This processor also allows the following IP based communications:

- Web GUI
- Vital linking
- GENISYS Office
- Telnet
- SNMP/SNTP
- SCP/SSH.

Proven Performance

The ElectroLogIXS® XP4 was built using the core of HXP-3 technology. Over 20 years of solid train detection performance was incorporated into the XP4. All options, adjustment parameter terminology were kept as close to HXP-3 for easier adoption.

Scalable

With the use of the VPM-3 vital processor, multiple ElectroLogIXS System units can be vitally linked through one of the two Ethernet ports through a standard cat5 cable. This allows up to 32 remotes (chassis) to be linked vitally in a local area network.

Recording And Analysis

The ElectroLogIXS XP4 System has a built-in recorder that logs time-stamped vital and nonvital events as well as internal logic state changes, crossing performance data and failures/reset information. All recorded events can be printed both trackside and in the office.
A set of resident diagnostic programs provides the tools necessary to perform system event analysis and troubleshooting.

Stored in the processor memory, the event storage will hold:

- Event storage - 100,000 events
- Error recording - 5,000 events
- Configuration settings - 1,000 events
- Crossing System Event – 15,000 events
- Grade crossing train records - 5,000 trains
- Train data log - 15,000 events
- Crossing Ring Status – 450 events

Architecture

The ElectroLogIXS XP4 System consists of:

- A 9-slot or a 4-slot chassis motherboard
- 9-slot , 4-slot, or 1 slot chassis
- CDU (control display unit)
- Personality modules with terminal block connectors for house wiring.

All modules have front panel indicators that display module health and I/O status. The CDU1 or a computer/ terminal connected to the diagnostic port serves as the human/machine interface for system installation and setup, parameter adjustment, and system testing and troubleshooting.

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Application

The ElectroLogIXS® XP4 is supported in the Logic Station suite of application development tools. The package contains the project developer for file management, the ACE compiler to generate application equations in relay logic diagrams, the validator utility to certify compiled files, and a simulator to debug applications prior to installation. This tool set is designed for use with other KB Signaling products, including VHLC and EC5.

ElectroLogIXS VPM-3 Ethernet processor

Communications, Networking and Scalability

The ElectroLogIXS XP4 VPM-3 processor contains 2 Ethernet ports which can network up to 32 vital links, each capable of 512 inputs and 512 outputs. Multiple ElectroLogIXS chassis can be vitally linked together on a standard Ethernet network with very low latency. Vital links can also be interfaced for communications outside the equipment house via media such as fiber optics, radio, RS232, RS485, and twisted pair.

Features

Number of Tracks
- Up to 4 normal/standby

Maximum Track Length
- 7,500 feet

Approach Frequencies
- 86Hz to 979Hz

Nine Island Frequencies
- 4Khz to 8Khz

Crossing Control
- Up to 80 amps of lights
- Up to 8 individual gates
- Up to 16 vital inputs to monitor gate position
- Up to 4 individually controlled bell control drives
- Up to 4 individually controlled non-vital outputs

Ground Fault Detector
- Three analog battery bank monitoring

MDR Controls
- 12 available

Processor
- Ethernet Processor

Communications
- Serial
- RS 232
- RS 422/485
- Ethernet
- Web GUI
- RP 2009 Vital linking
- GENISYS Office
- Telnet
- SNMP/SNTP
- SCP/SSH

Contact your KB Signaling Business Development Manager
Call 1-800-825-7090, or Email us at aso.techsupport-kb@alstomgroup.com for more information today

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