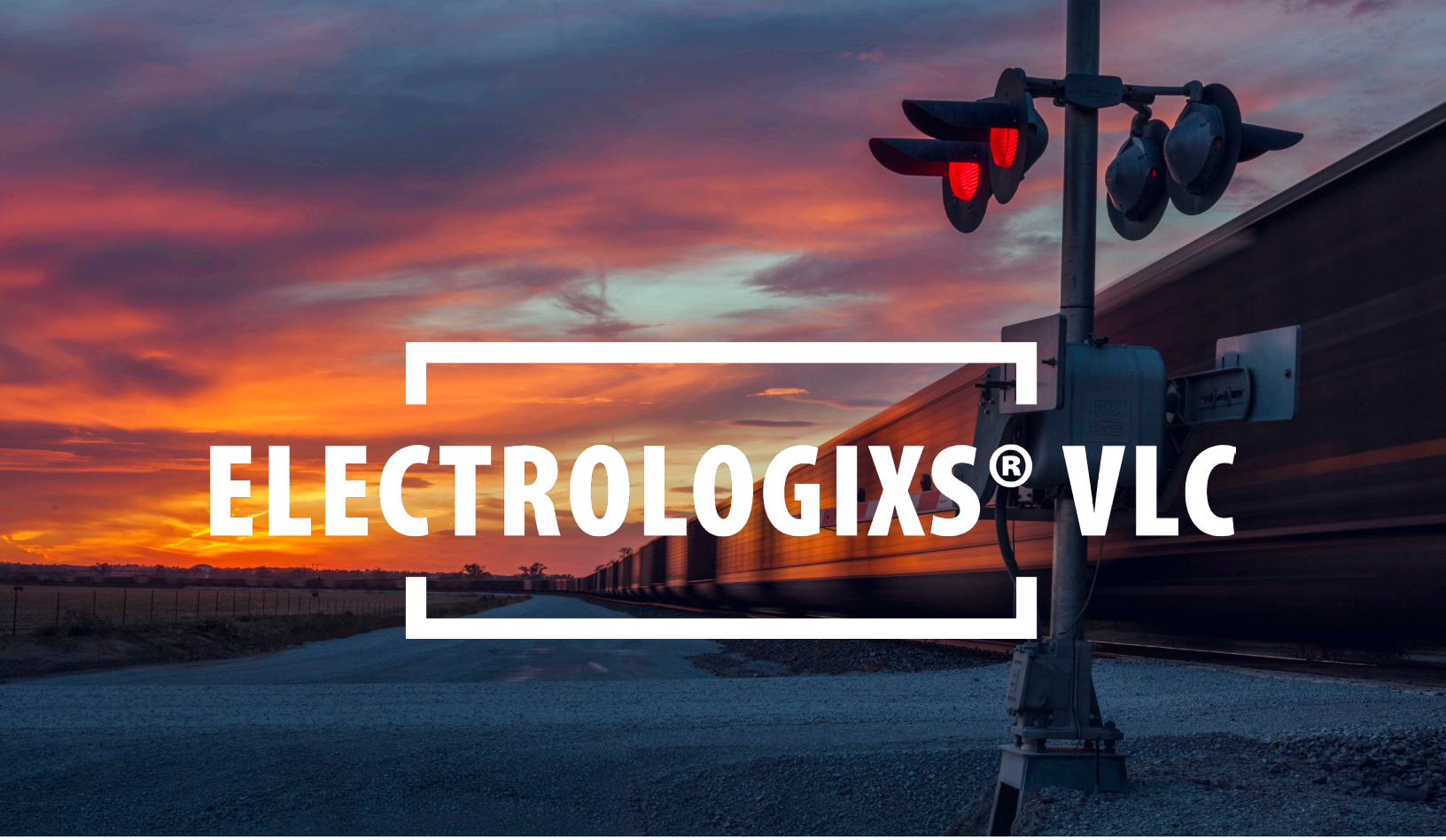


ELECTROLOGIXS® VLC

Interlocking and Signaling Controller

The ElectroLogIXS® family of products from KB Signaling is engineered to simplify and streamline wayside control. At its core, the ElectroLogIXS VLC is a fully integrated, vital Wayside Device Controller designed for a wide range of signaling applications. With flexible configuration options and scalable architecture, it delivers a cost-effective solution for everything from small repeater locations to complex interlockings – backed by the proven reliability of KB Signaling's vital wayside products.

KB SIGNALING™

ElectroLogIXS® VLC
Interlocking and Signaling Controller

Highlights

- Demonstrated reliability with over 25,000 units in service worldwide
- Self-contained interlocking and signaling solution
- Flexible, modular configurability
- Three chassis options
- Incrementally & easily upgradeable
- Shares modules and tools with ElectroLogIXS® EC5 and XP4
- Integrated PTC WIU functions

General Description

ElectroLogIXS® shares modules and software tools across train control, signaling, and grade crossing applications. This can decrease design time, simplify installation and maintenance, maximize training effectiveness, and lead to a reduction in spares inventory requirements.

Configured as an interlocking or signaling control system, the ElectroLogIXS VLC provides control of power switch machines, direct interface to coded track circuits, and self-proving lighting control for AC and DC signal lamps.

Customer Benefits

Flexible

The ElectroLogIXS VLC can easily be populated to control diverse locations by installing application and system modules in a nine-slot, four-slot or one-slot 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 I/O capacity required. All controllers use the same 3rd generation vital processing module (VPM-3).

Scalable

With the use of the VPM-3 vital processor, multiple ElectroLogIXS System units can be vitally linked to up to 32 remote units, I/O modules (ElectroBlox), and wayside occupancy detection equipment such as axle counters.

Protocols

The ElectroLogIXS VLC supports the most critical communications capabilities and standards. Communications is supported by 2 Ethernet ports and up to 4 serial ports. The system executive is capable of vital remote links, fully compliant PTC message generation, the most widely used office protocols, and a full suite of industry standard system management protocols.

Proven Performance

The ElectroLogIXS VLC shares modules, design principles, and programming tools with the ElectroLogIXS XP4, Electro Code 5 and VHLC products.

The ElectroLogIXS VLC provides excellent product safety and reliability demonstrated through over 20 years of safe and reliable operation and a current installed base of over 25,000 units.

ElectroLogIXS® VLC
Interlocking and Signaling Controller

Advanced Wayside Signal Functions

The ElectroLogIXS® VLC is designed to increase system availability and simplify installation and maintenance. Design attributes include graceful degradation, assuring single I/O failures will not affect the other operational modules. The ElectroLogIXS VLC also includes one-person digital setup for lamps and track circuits, common development software tools, and simplified diagnostics and recorder functions.

Application

Applications are developed on LogicStation™, a suite of application development tools from KB Signaling. The suite provides the application engineer with file management, a compiler to generate application equations based on relay logic diagrams, a validator utility to verify compiled files, and a simulator to debug applications prior to installation. This tool set is designed for use with other KB Signaling products including ElectroLogIXS XP4, VHLC, and Electro Code 5.

CENELEC

The ElectroLogIXS VLC is available in configurations that have been independently assessed to be fully compliant to EN50129, EN50128, and EN50126.

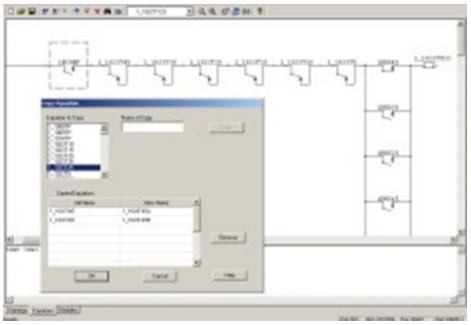
Architecture

The system consists of a chassis backplane assembly, a control display unit, system modules, application modules, and personality modules with high-density terminal connections for hard wiring the system to wayside signal and track circuit connections. All modules have front-panel indicators that display module health status and function indicators for monitoring active I/O signals.

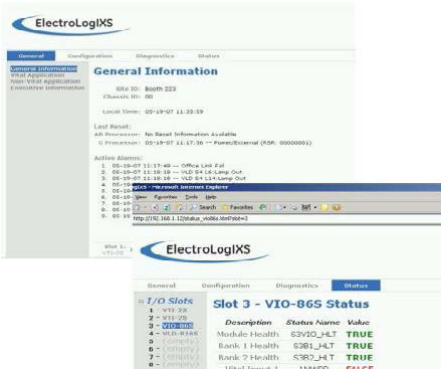
The human/machine interfaces include a rugged Control Display Unit (CDU) and a Web GUI (Graphical User Interface) displayed on any connected web-enabled device. Both interfaces support system installation, maintenance, and troubleshooting. In addition to the Web GUI, a variety of system management protocols provides user access to statuses, diagnostics, log files, and setup information.

ElectroLogIXS
VPM-3 Processor

Specifications	
Operating Voltage	9.5 to 16.5 volts DC
Cycle Time	All vital equation evaluations reach stability within 250ms. Non-vital equation evaluations reach stability within 100ms
Logic Equations	VPM-3 supports up to 10,000 vital equations and up to 10,000 non-vital equations
Timers	127 vital timers and 1023 non-vital timers
Recorders	512 vital recorders and 512 non-vital recorders
Temporaries	4,096 vital temporaries and 4,096 non-vital temporaries
Track Circuits	Up to eight 24,000 foot track circuits @ 3 ohms per 1,000 ft ballast impedance with cab signal control outputs available for each track circuit
Lamp Control	Up to nine 110 VAC or unregulated 12 VDC self-proving direct drive lamp modules per system (8 lamps per AC module, 16 lamps per DC module). Up to six regulated DC lamp modules per system (6 lamps per module)
Vital I/O	Up to nine 12 V, 24 V, or 50 V I/O modules (8 inputs and 6 outputs per module). Up to nine 12 V I/O modules with 4 redundant inputs and 4 redundant outputs
Cab Signal	Up to two 16-channel cab control modules with applicaiton controlled cab rates
Non-vital Links	2 links of 1,000 controls and 1,000 indications. 1 link of 128 controls and 128 indications
NV Protocols	Genisys, ATCS, BCS, ARES, SCS-128, UCE, LCP, Modbus, CTC over ITCM
Vital Links	Up to 32 remote vital links to VLCs, VHLCs, XP4s, EC5s, or axle counters
Vital Protocols	RP2000, RP2009, FSFB/2
PTC Protocols	EMP Class D, Wireless crossing, ITCS
Systems Mgmt.	SNMP, SCP, SSH, Telnet, FTP, SNTP, EMP
Event Recorder	100,000 events; 5,000 errors; 1,000 configuration variables



ElectroLogIXS Application Development



ElectroLogIXS Web GUI

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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