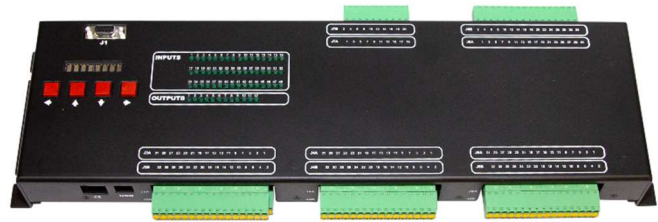# Trilogy Products

FEATURES

- **48 Differential Digital Inputs**
- **8 Analog Inputs**
- **12 Relay Digital Outputs**
- **I/O Isolated to 2kVAC**
- **Connectivity**
  - **RS232 Serial Port**
  - **10/100 Base-T Ethernet**
  - **USB Mass Storage Endpoint**
- **Front Panel User Interface for Diagnostic and Configuration**
- **Supports Industry-Standard Communication Protocols and Logging, including Genisys, DataTrain VIII, Peer, Modbus, Electrologixs/VHLC**
- **MicroSD card-based Data Storage Capability**
- **Real-Time Clock for Date/Time Stamping**
  - **Time Synchronization using NTP**
- **Meets AREMA 11.5.1 for Class C Equipment**

OVERVIEW

The SiLoggerXLe Data Logger is capable of reading up to 48 digital inputs, 8 analog inputs, and can control up to 12 digital outputs. Additionally, the Data Logger is capable of logging from various communication-based logical links, and can also function as a communication gateway and a non-vital logic processor. I/O banks are separated in groups of 4 that are isolated from each other to 2kVAC as well.

The Data Logger includes a built-in display that shows operational information such as software version, I/O status, fault status, etc. Additionally the buttons on the front panel provide a menu interface for configuration and diagnostics.

Log files can be retrieved via Ethernet interface using FTP, USB OTG using a PC, web interface or, if necessary, by removing the MicroSD card physically and reading it with a card reader. Data Logger firmware is field upgradable, by a simple procedure, via Ethernet.

CONNECTIVITY

The Data Logger can be accessed multiple ways, for example via FTP, USB, or web interface. The Data Logger also supports NTP for time synchronization to a time server.

LOGGING CAPABILITIES

The internal storage medium used by the Data Logger is MicroSD card based. MicroSD and MicroSDHC/XC cards are supported. At the time of this writing the Data Logger XLe ships with a 32GB MicroSD card installed.

Below are some types of data that can be configured for logging:

- Communication link data changes
- Communication status changes
- Input/Output bit changes
- Analog input changes
- Fault conditions

Log files are automatically created at startup, and at the start of each day. Data can be set to log periodically or only on changes. Old log files can be set to automatically delete after a specific amount of time, ensuring that the MicroSD card will not fill up completely and be unable to log new data.

MAPPING AND LOGIC ENGINE

The Data Logger XLe features the ability to map bits and values from incoming data links to internal registers, other communication links, and digital I/O. This permits the Data Logger to be used as a gateway device to translate between protocols, or between digital I/O and logical I/O. In addition there is an expression evaluator built into the Data Logger that allows manipulation of internal data structures to perform more complex functions than simple mapping would permit.

MECHANICAL SPECIFICATIONS

Dimensions	19in W x 5.25in H x 3in D
Max Connector Wire Gauge	#16 AWG
USB Connector	USB-B
Ethernet Connector	RJ45
Serial/IO Connector	DB-9 Female

ELECTRICAL SPECIFICATIONS

Input Voltage	9-36V_{DC}
Maximum Power Consumption	18W@12VDC
Operating Temperature Range	-40°C to+70°C
Min Digital Input ON Voltage	+9V_{DC}
Max Digital Input ON Voltage	+36V_{DC}
Min Digital Input OFF Voltage	-20V_{DC}
Max Digital Input OFF Voltage	+2.5V_{DC}
Min Analog Input Voltage	0V_{DC}
Max Analog Input Voltage	36V_{DC}
Channel to Channel Isolation	2000V_{RMS}/1 Min
COM Ports to I/O Isolation	2000V_{RMS}/1 Min
Primary to COM Ports & I/O Isolation	2000V_{RMS}/1 Min
Memory Size	32MB RAM, 32GB MicroSD

Trilogy Products

PHYSICAL LAYOUT

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