SiLoggerMini

Rugged Miniature Data Logger

FEATURES

- **Small Form Factor**
- **DIN Rail Mount**
- **Extended Temperature Range (-30C to +70C)**
- **Trouble Alarm Relay Contact (NO)**
- **Configurable Relay Output Contact (NO)**
- **Isolated Digital Input (9-36V_{DC})**
- **Isolated Analog Input (0-36V_{DC})**
- **Eight Character User Interface Display**
- **Computer Interfaces**
  - Serial Port 1 - RS232
  - Serial Port 2 – Configurable RS232/422/485
  - 10/100 Ethernet
  - USB-B Connection for Log Access
  - Communication Protocols Including
    - Genisys
    - Data Train 8
    - Microlok II Peer
- **Data Storage Capability**
  - Up to 64GB (via internal MicroSD card)
  - Built-in Real-Time Clock for time stamping
  - Time Synchronisation using NTP

DESCRIPTION

The Trilogy Products SiLoggerMini is the small form factor alternative to the DataLoggerXL. The SiLoggerMini has been developed specifically for the transit/rail industry but is suitable for other industrial/commercial applications where event recording is preformed over a serial interface. One analog input is provided for logging a power supply or battery charger voltage. One digital input is provided for logging an external point. One general purpose output point is provided for use to generate an external trigger. The SiLoggerMini can be customized to log data via the communication interface using various standard protocols.

The SiLoggerMini contains a computerized display used to show status of I/O points, communication settings, and other important system info.

Log files can be retrieved from the SiLoggerMini via FTP over Ethernet using any FTP client software. Additionally, the SiLoggerMini will appear to any computer as a read-only USB Mass Storage Device which requires no additional software for data extraction.

MECHANICAL SPECIFICATIONS

Height	5in
Width	1in
Depth	6in
Max Connector Wire Gauge	#16 AWG
USB Connector	USB-B
Ethernet Connector	RJ45
Serial/IO Connector	Phoenix Contact 1875917

DATA LOGGER CAPACITY

The logging capacity is at least 100 days per 1GB of storage space. The exact capacity depends on a number of factors. The internal storage medium used by the Data Logger is MicroSD card based. Cards up to 64GB are available (at the time of this writing), but the frequency of data changes and length of variable names can vary. In a conservative estimation using the worst-case log entry length of 100 characters, and an event frequency of 1 event per second, one can calculate that data would be logged at a 360kB / hour (8.64MB / day) rate. This means that a 4GB MicroSD card could contain 462 days of data at this rate, while a 64GB card could contain 7392 days of data. Even at higher event rates, it is clear that readily-available MicroSD card capacities will permit years of event recording without reaching storage capacity.

The SiLoggerMini can be configured to automatically delete log files older than a configurable number of days for a first-in first-out mechanism to prevent the file system from being overrun with old log files.

ELECTRICAL SPECIFICATIONS

Input Voltage	9-36V_{DC}
Maximum Power Consumption	5W
Min Operating Temperature	-30°C
Max Operating Temperature	+70°C
Digital Input Isolation	3000V_{RMS}
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}
Analog Input Isolation	3000V_{RMS}
Min Analog Input Voltage	0V_{DC}
Max Analog Input Voltage	36V_{DC}
Relay Output Isolation	3000V_{RMS}
Memory Size	Dependant on MicroSD Capacity

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PHYSICAL LAYOUT