

Reliable Power Starts with Precision Timing!

Sequence of Events Recorder (SER-32e)

The Sequence of Events Recorder (SER) provides precise, 1 millisecond time-stamped event recording for 32 channels to enable root-cause analysis and advanced system diagnostics. It also provides time synchronization to associated devices with support for several time protocols such as Precision Time Protocol (PTP) and IRIG-B.



Sequence of Events Recorder
SER-32e

Features:

- Color Touchscreen:**
 The SER-32e has a large 4.3" color touchscreen for easy menu navigation, device setup, diagnostics and input status viewing.
- Time Synchronization:**
 Supports IEEE-1588 Precision Time Protocol (PTP), IRIG-B, DCF77, Network Time Protocol (NTP), Modbus TCP/IP, 1 per 10 and ASCII RS-485.
- Expansion Slots:**
 The SER-32e includes 2 expansion slots for additional Digital Input and Digital Relay Output modules.
- Embedded Web Server:**
 Connect over Ethernet via a standard secure web browser (HTTPS), with no proprietary software needed.
- Easy Integration:**
 Support for Modbus TCP and/or RESTful API, data allows easy integration into any SCADA, Power Monitoring and Building Management System.
- Extended Control Power Ride-through:**
 An extended control power ride-through to ensure critical events are captured during power loss/outage.

SER - Typical Monitored Points

- Breaker status: open/closed/tripped
- Relay trip signal: normal/trip
- Control switches: open/closed commands
- Control scheme status: auto/manual/test
- Auto-transfer switch (ATS) status: normal/emergency/test
- UPS status: normal/transfer/bypass
- Generator status: stopped/running
- Battery status: normal/alarm

Know What Happened and When.

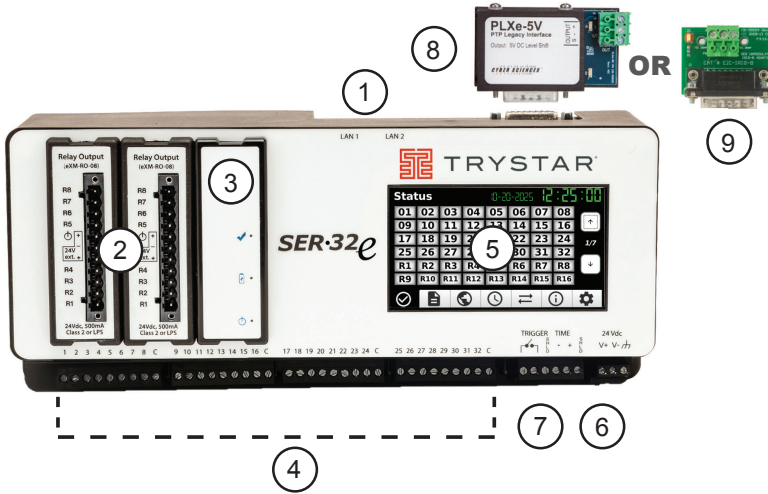
to **1 ms**

Events happen. Reduce your risk.

Understand • Respond • Prevent

- Perform root-cause analysis based on reliable data
- Identify the initial event and track how it cascaded throughout the system
- Evaluate control sequences, timing and operating actions
- Resolve or mitigate persistent issues
- Identify slow breaker operation before it can cause an arc-flash hazard

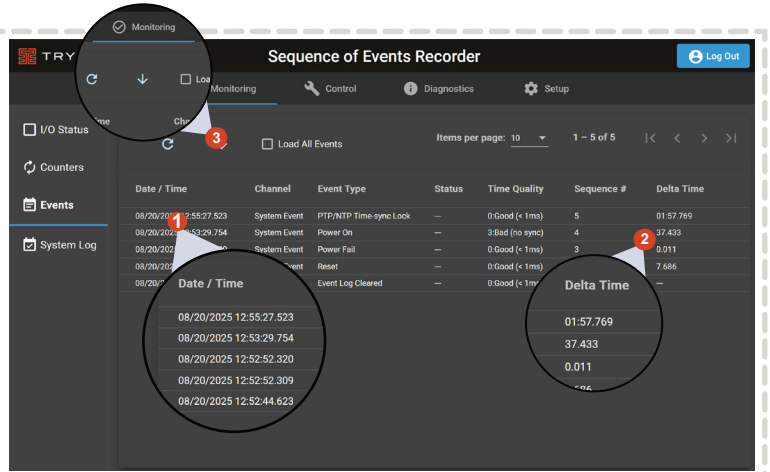
Key Features



- ① Secure Embedded Web Server
2 x 10/100BaseTx Ethernet ports
- ② 2 x Option Slots for additional I/O Modules
- ③ Power Control Module
- ④ 32 High Speed Digital Inputs
- ⑤ Color Touchscreen
- ⑥ 24 Vdc Control Power
- ⑦ High Speed Trigger Output / RS-485 IN/OUT, Inter-SER or ASCII
- ⑧ PLX-Connector for IRIG-B, DCF77, 1 per10 Output (optional)
- ⑨ EZ-Connector for IRIG-B or DCF77 Input (optional)

Event Reconstruction and Analysis

- ① Event Details, 1 ms timestamps
- ② Elapsed time between start/stop pairs
- ③ Export to .csv file



Ordering Information

| Catalog no. | Description |
|-------------|--|
| SER-32e | Event Recorder, 32 inputs, 24 VDC Power, 24 VDC Inputs, DIN Rail Mounted (11.5" W x 5.0" H x 2.62" D) |
| eXM-RO-08 | 8-output Option Module, 24 VDC, Pluggable Screw Terminal Connector |
| eXM-DI-08 | 8-input Option Module, 24 VDC, Pluggable Screw Terminal Connector |
| PLXe-5V | PTP Legacy Interface for SER-32e, 5V, powered by SER-32e, connects to SER connector (DB-15) (2.92" W x 1.72" H x .84" D) |
| ADK-125V | SER Adapter Kit Bundle (4 units) for 125V |
| AD125-24V | Individual SER Adapter unit for 125V |
| PLX-24V | PTP Legacy Interface, 24V, 24Vdc, connects to SER connector (DB-15), (2.92" W x 1.72" H x 1.12" D) |
| EZC-IRIG-B | EZ connector for SER (input: IRIG-B time source) |
| EZC-DCF77 | EZ connector for SER (input: DCF77 time source) |