Precision Time Synchronization ...
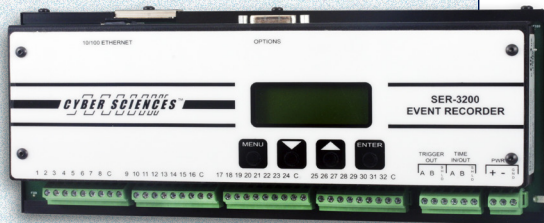
Why specify an EPMS without it?

I ♥ 1588 ℠

CyTime™
Sequence of Events Recorder
SER-3200/2408

1 msec!

CONSULTING - SPECIFYING
engineer.
2016
PRODUCT
OF THE YEAR | Silver

Synchronized Timestamping of Recorded Events

Modern Electrical Power Management Systems (EPMS) require precision time synchronization of devices for reliable operation and meaningful data analysis. CyTime™ Sequence of Events Recorders (SER) record state changes to 1 msec **and** serve as a time-sync hub for other devices. SERs sync automatically via PTP (IEEE 1588), and generate legacy protocols (e.g., IRIG-B) for relays and meters.

▶ *Act now! Download SER guide specs, white papers and more—visit:*

CYBER SCIENCES ™

www.cyber-sciences.com/specify

CyTime ™ **Sequence of Events Recorders** are an essential part of an Electrical Power Management System (EPMS). High-speed digital I/O (32) monitor the status of circuit breakers, relays, generators, or UPS. PTP (per IEEE 1588) enables automatic time synchronization over Ethernet within 0.1 msec. Specifically, Cyber Sciences proposes the "Simple PTP" profile (SPTP), which achieves hi-res time sync without special Ethernet switches. Have relays and meters that don't support PTP yet? No problem. An SER-3200/2408 can accept PTP, then output the legacy protocol required.

EPMS

Ethernet

CyTime™
SER-3200/2408

PTP Master

PTP

PTP Slaves

All devices sync'd within 100 microseconds!

➤*Time-sync OUT legacy protocols:*
—*IRIG-B*
—*DCF77*
—*ASCII RS-485*
—*1per10*
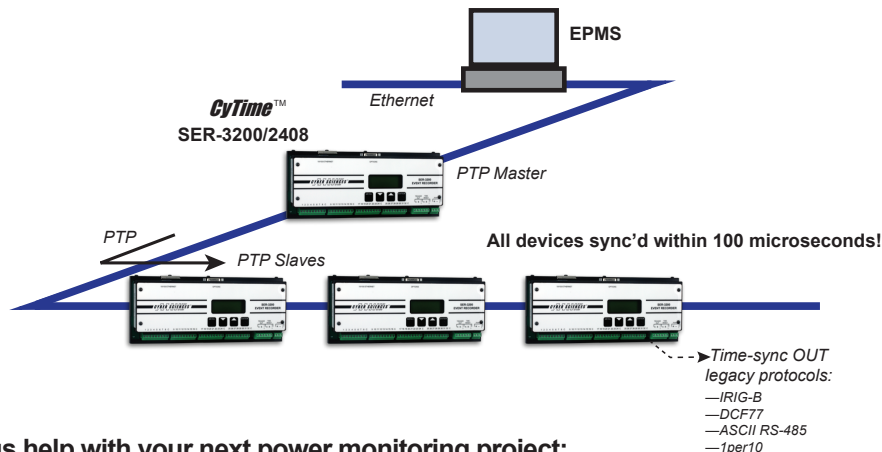
Let us help with your next power monitoring project:
FREE—design assistance for Sequence of Events Recording systems
FREE—online technical library and training courses, 24/7
FREE—responsive tech support via email, phone or fax

For More Info...

INTRODUCTION
Handout : SER Overview
Presentation : PTP-Enabled SER
Data Sheet: PTP-Enabled SER
Data Sheet: CyTime SER-3200/2408

INSTRUCTION BULLETINS
CyTime SER User's Guide
CyTime SER Reference Guide

TECH NOTES (White Papers)
PTP-Enabled Hi-Res Time-Sync
SER System Architectures with PTP
Measuring Breaker Opening Times
Legacy Time Codes (e.g., IRIG-B)

LEARNING
Online Demo
Online Technical Training
SER Guide Specs *(doc or pdf)*
SockMonkey demo game
(Fun way to illustrate SER)

► *Find these resources and more in the Cyber Sciences Technical Library:*

www.cyber-sciences.com/library

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Precision Timing for Reliable Power. *Simplified.* SM