

4g TECHNOLOGIES

The next generation in Sequential Events Recording.™

See Our New
Virtual Graphic
Annunciator the
4g VgA™



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PRODUCTS

The 4g Event Recorder and SER Web Interface are products of the 21st century and accordingly have the processing power, security and dependability you would expect. This family of event recording devices employs multiple types of memory to insure operating configuration, valuable event data and history is preserved until you need or request it. The 4g SER and SER Web Interface are modular, highly accurate and dependable. Some of the features include:

- Up to 5,120 points or 20 chassis in a single SER system configuration
- Retrieves point configuration and alarm condition data
- Stores retrieved data in history files in tab delimited format for importing to a spreadsheet or word processor
- Configuration from PC with browser
- No special or extra hardware or software to buy.
- AC or DC, Internal or External Field Contacts
- Local and remote data retrieval
- Interfaces to existing event recorder*
- Multiple platform interface
- Resident Apache web server
- 1mS or .1mS resolution
- 3 Ethernet connections
- 3 Configurable Serial Ports
- 8 output relays
- Per Point Debounce
- 80 character legends
- On board system diagnostics
- Repetitive Alarm Suppression
- Redundant System Configuration



4g SER

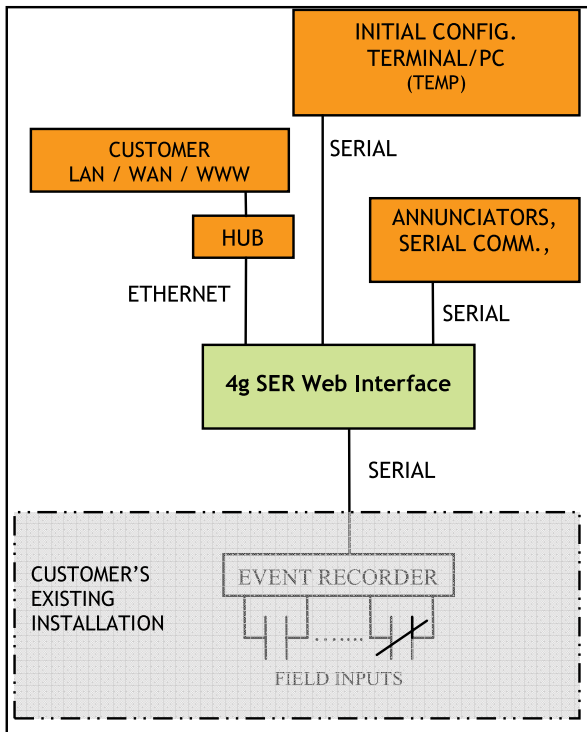
**requires existing SER supports either Serial or Ethernet communications.*

- Connects to existing Event Recorder*
- Retrieves point configuration and alarm condition data
- Stores retrieved data in history files (up to 150,000 events) in tab delimited format for importing to a spreadsheet or word processor
- Configuration from PC with browser
- No special or extra hardware or software to buy.
- On board system diagnostics
- Local and remote data retrieval
- Multiple platform interface
- Resident Apache web server
- 2 Ethernet connections
- 3 Configurable Serial Ports
- 8 output relays

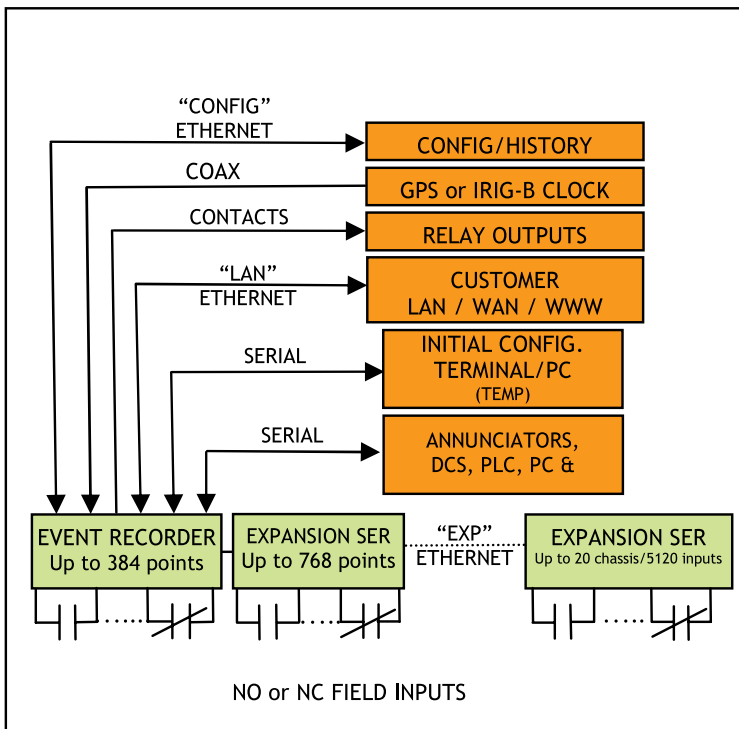


4g SER Web Interface

BLOCK DIAGRAMS

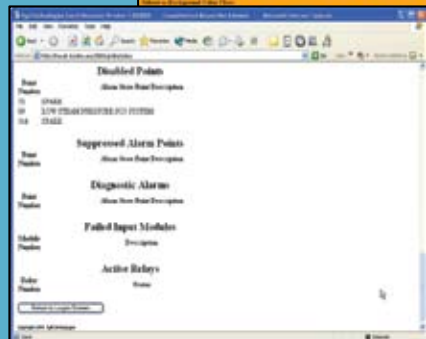
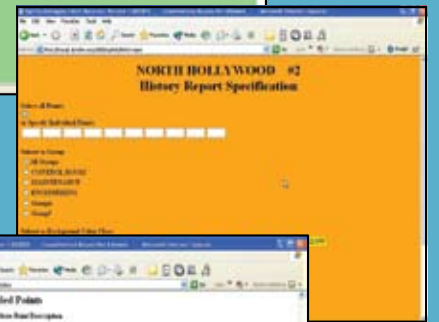
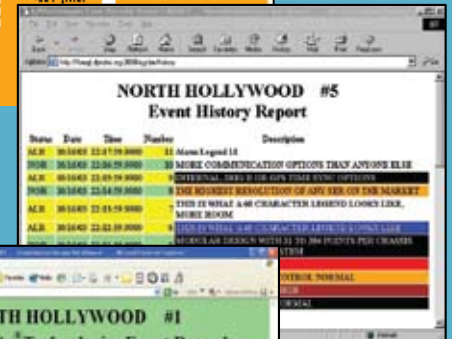
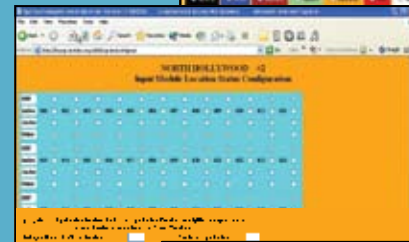
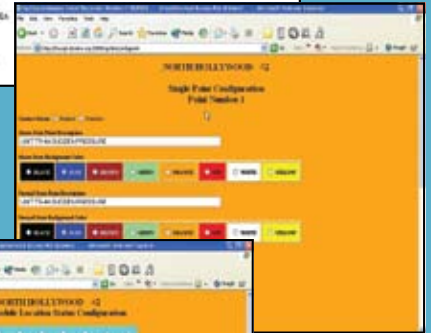


SER WEB Interface Typical



SER 384 & SER 5120 Typical

SAMPLE SCREENS



Input Point Capacity (SER)

Single Chassis: 384 points (12/32 point cards)
 System: 5120 points (up to 20 chassis)
 Note: This specification applies to 1ms input cards.
 Contact factory for specifications on .1ms units.

Input Resolution (SER)

1ms Standard and .1ms option

Input Isolation (SER)

Protected to 2.5kV input to input and 2.5kV input to output, per IEEE 37.90.1-1989.

Input Connection (SER)

37 pin sub-D shell connector per 32 inputs

Input Power

Standard: 85-132 Vac 50/60Hz or
 110-170 Vdc
 Option: 24 Vdc
 48 Vdc
 250 Vdc

Field Contacts (SER)

Voltage: 24 Vdc
 48 Vdc
 125 Vdc
 250 Vdc
 120 Vac
 Polarity: Positive or Negative Input
 Status: normally open (N.O.) or normally closed (N.C.)
 (configurable on a point by point basis)

Field Contact voltage may be either internally or externally supplied

Clock Accuracy & Synchronization

Standard: Internal 1ppm, accurate to 3 sec. per yr.
 Standard: input for sync to external IRIG-B signal, accuracy dependent on IRIG-B source.
 Option: module for external sync to GPS transmitter, 1pps output synchronized with UTC

Industry Standards & Compliance

Safety: EN 61010-1: 1993
 EMC:
 RFI: EN 61000-4-3
 Fast Trans: IEEE 37.90
 Emissions: EN 55024-4
 SWC: IEEE 37.90

Approvals & Certifications

The unit has been designed to be compliant with and is expected to be UL and cUL approved and CE marked. Updates on these processes may be found on our web-site.

Environmental

Operating Temp: 0-70 °C (32-144 °F)
 Humidity: 0-95% non-condensing
 Protection: Nema 1 / IP30

Dimensions

19" rack mount chassis
 Height: 3U or 5.25 inches (133mm)
 Depth: 12.5 inches (317mm)

Memory

BB SRAM: 8 MB; stores a back-up of system configuration, the daily historical log (up to 150,000 events)¹, and historical buffer, up to 10,000 events; uses lithium cells for back-up
 SDRAM: 128 MB; stores running memory
 Loader: 16 MB; Flash memory for boot loader and object code programs

¹ Files are tab-delimited and can be uploaded to a spreadsheet application or word processor on 4g supplied operator workstation or customer PC.

Specifications subject to change without notice.

Communications

Serial I/O: Three (3) individually configurable for RS232, RS422 or RS485. Supports many devices including printers, annunciators, etc. These I/O ports support ASCII, Modbus and BPA protocols.
 Ethernet: Three (3) individual and function specific I/O: chassis expansion, system config./history and customer LAN, WAN or internet.
 Relays: Eight (8) individual outputs configurable for synthesized points with five modes of operation.
 T/Sync: RS485 dedicated I/O for multi-chassis system time sync.
 Maint. Port: RS232 I/O dedicated to initial unit configuration and diagnostics.

Options

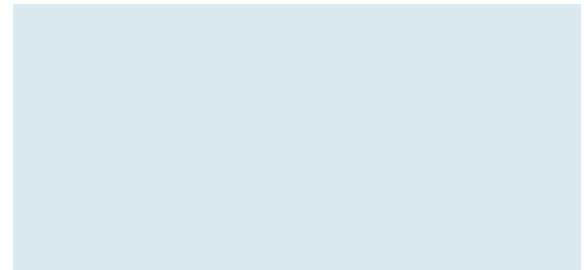
GPS Receiver, antenna and cable
 IRIG-B Generator and cable
 Cabinets and other enclosures
 Input Terminal Assembly
 Relay output terminal assembly
 Cable assemblies
 Thin Client and wireless workstations
 Local and network printers
 Network devices
 Alarm annunciators
 Computer solutions for workstations
 Application specific software (NFS Client, MS office, Server, etc.)

Warranty

4g Technologies (4g) warrants equipment of its manufacture to be free from defects in material and workmanship under conditions of normal use and service. And for a period of three (3) years after original date of sale, 4g will repair or replace at 4g's sole discretion, any product found to be defective under this warranty. THIS WARRANTY CARRIES NO LIABILITY EITHER EXPRESSED OR IMPLIED, BEYOND THE REPAIR OR REPLACEMENT OF EQUIPMENT THAT CARRIES THIS WARRANTY.

Equipment supplied by 4g and manufactured by others carries the original manufacturers' warranty unless explicitly stated in the purchasing contract or 4g's acknowledgement.

Represented By:



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