The new NetDecoder™ industrial communications analyzer out-performs traditional office-LAN diagnostic products with additional troubleshooting features designed specifically for your factory-based networks. It supports most major industrial protocols in an easy to use PC-based package, providing a useful tool for network support, industrial design and systems integration ▲

Diagnostic Tools
Industrial Communications Analyzer

Features

- **Decodes industrial serial, Ethernet and fieldbus data into understandable information**
- **Provides both data capture and analysis on-line, enabling immediate troubleshooting**
- **Easily identifies faults via comparison to protocol standards or user based limits**
- **Provides insight to network performance through comprehensive statistics display**

As industrial networks become increasingly mission-critical, the cost of downtime can be thousands of dollars per hour, and undetected, under-performing networks can further cut profitability. Locating the cause of poor performance can take hours, or days. Communications analyzers provide a view inside the network traffic, enabling administrators to locate the root cause and quickly take corrective action ▲

NetAlert™! Net Decoder

The NetAlert! NetDecoder provides protocol, data and timing analysis for Ethernet, Serial and Fieldbus networks. These functions allow you to quickly analyze network health, and to diagnose conditions to specific fault sources. It compares your data packets against the industry standard protocols, locating errors and their sources. Intermittent faults are quickly trapped and flagged by the NetDecoder. It identifies more faults than any other tool, including wire, media, or commercial protocol analyzers.

This PC-based software package can decode and filter communication fault conditions in real-time. Large data streams can be captured, allowing off-line analysis. Network statistics can be generated, helping you identify less-than-optimal network designs, and providing early warning of growing faults. Ease of use is assured by using a common look-and-feel for Ethernet, Fieldbus or Serial network analysis. The optional Toolkit license enables you to customize thresholds and field value comparisons to flag application-specific errors. Custom protocol decoders may also be generated. Definable filters simplify locating the pertinent data, while multiple presentation formats enable the data to be viewed in Hex, Binary, ASCII, or English ▲

The NetAlert! NetDecoder quickly identifies a wide range of network communication faults, including:
- Improper automation component operation (PLC, I/O, sensor)
- Control program and I/O response timing
- Excess collisions (Ethernet only)
- Corrupted data packets
- Communication protocol bugs
- Faulty network interface circuitry
- Defective interconnections
- Inaccurate gateway protocol translations
- Excess network loading
- Unauthorized plant floor network access

Woodhead Connectivity

NetAlert!

System Requirements

- **Pentium PC with Windows 95/98/ME/NT/2000**
- **Installed RAM**
  - 128 Mbyte recommended
  - 64 Mbyte min. for Windows 2000
  - 32 Mbyte min. for Win95/98/ME/NT
- **Available hard drive space (min):**
  - 5 Mbyte for Serial captures
  - 10 Mbyte for Fieldbus captures
  - 20 Mbyte for Ethernet captures
- **Network Interface Cards (NIC)**
  - Any promiscuous Ethernet NIC with time stamps for Ethernet analysis
  - One Serial port for simplex Serial analysis
  - Two Serial ports, or SyncProbe and one parallel port, for duplex Serial analysis
- **Product performance is effected by PC processor speed and RAM**

Protocols Supported

Ethernet
- **Included:** TCP, UDP, IP, ARP, RARP, DNS, HTTP, ICMP, IGMP, NBDS, NBNS, NBSS, SMTP, IBM NetBIOS, SMB, Novell Netware (IPX, SPX, IPX NetBIOS, IPX RIP, IPX SAP, NCP), and ISO, CLNP protocols
- **Options:** EtherNet/IP, PCCC, DNP3, Modbus TCP

Serial
- **Included:** TCP/IP, PPP, SLIP, Async
- **Options:** Modbus RTU, Modbus ASCII, DF1, DNP3, COMLI

Fieldbus
- **Included:** None
- **Options:** AB DH485, AB DH+
  Contact Woodhead Connectivity Technical Support for Availability of Additional Fieldbus Protocols

Ordering Information

Base Packages

NetDecoder Part No.	Description
ICA-ALYZR-EFS	Industrial Communications Analyzer (ICA) for Ethernet, Fieldbus & Serial (EFS) communications. Also includes ICA-ALYZR-S features.
ICA-ALYZR-S	Industrial Communications Analyzer (ICA) for Serial (S) only. Includes Serial Tap cables for monitoring Tx & Rx simultaneously (full duplex)
ICA-ALYZR-UPGRD	Upgrade from ICA-ALYZR-S to ICA-ALYZR-EFS
ICA-ALYZR-ALL	Includes ICA-ALYZER-EFS plus all Ethernet, Fieldbus & Serial protocol decoder options available at time of purchase

All licenses allow for usage on one computer only.

Protocol License Options

NetDecoder Part No.	Description
Ethernet Protocols	
ICA-DEC-E-ETHIP	Protocol Decoder License for EtherNet/IP
ICA-DEC-E-DNP3	Protocol Decoder License for DNP3 over Ethernet
ICA-DEC-E-MBTCP	Protocol Decoder License for Modbus TCP
Serial Protocols	
ICA-DEC-S-MBRTU	Protocol Decoder License for Modbus RTU over Serial
ICA-DEC-S-MBASC	Protocol Decoder License for Modbus ASCII over Serial
ICA-DEC-S-COMLI	Protocol Decoder License for COMLI over Serial
ICA-DEC-S-DNP3	Protocol Decoder License for DNP3 over Serial
ICA-DEC-S-DF1	Protocol Decoder License for DF1 over Serial
Fieldbus Protocols	
ICA-DEC-F-DH485	Protocol Decoder License for DH-485
ICA-DEC-F-DHP	Protocol Decoder License for Data Highway Plus (requires ICA-PRB-F-DHP probe for live data capture)
Combination Package	
ICA-DEC-PKG-ETH	Protocol Decoder Package License for industrial Ethernet protocols including Modbus TCP, EtherNet/IP, and DNP3
ICA-DEC-PKG-RA	Protocol Decoder Package License for Rockwell Automation protocols including DH-485, DH+, PCCC, DF1, and EtherNet/IP. DH+ analysis requires ICA-PRB-F-DHP
ICA-DEC-PKG-GS	Protocol Decoder Package License for Group Schneider protocols including Modbus ASCII, Modbus RTU & Modbus TCP
Custom Protocol	
ICA-DEC-TOOLKIT	Custom Decoder Toolkit License (run-time & development) for creation of decoders for proprietary protocols or to add custom threshold or field value comparisons. One License needed per Analyzer

Hardware Accessories

NetDecoder Part No.	Description
ICA-PRB-S-US	Synchronous Data Probe (SyncProbe) with 110 VAC power supply. Adds HDLC, SDLC, X.25, SNA, Frame Relay, protocols to ICA-ALYZR-S. Supports up to 64 kbaud synchronous data (bisync and monosync) and up to 38.4 kbaud asynchronous data. Also allows use of one PC parallel port instead two PC serial ports for full duplex data collection.
ICA-PRB-S-EU	Synchronous Data Probe with 220VAC power supply. Same functions as ICA-PRB-S-EU
ICA-PRB-F-DHP	Probe to connect Data Highway Plus to a serial port on the PC.
ICA-IC-S-232	2 port serial RS232C PCMCIA board. Required for full duplex analysis (monitor both Tx and Rx lines) if PC only has one serial port. Not needed if SyncProbe used.
ICA-IC-S-485	2 port serial RS485/RS422 PCMCIA board. Required for full duplex differential (RS422) and differential multidrop (RS485) analysis and if PC does not contain one RS422/485 port for 2-wire or two RS422/485 ports for 4 wire.
ICA-AG-SU-1	1 year software support & upgrade agreement
ICA-AG-SU-3	3 year software support & upgrade agreement