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# DataProbe T30 Analyzer

## Fax V.34 Protocol Analyzer

### Features

Powerful fax passive monitor/protocol analyzer with V.34 support

Monitor and record fax calls up to 33,600 bps

Analyze exchanged data for conformance

Analyze duration of tones, messages, mode changing, silent periods, and variance from expected T.30 signal flow

All modulations supported: V.34, V.27, V.29, V.33, V.17

Configurable fax call generation for end-to-end and load testing (with optional utility, FaxSend)

Multi-node configurations for end-to-end capture and analysis

### Benefits

2nd generation V.34 capable test product with T.30 analysis

Save time troubleshooting interoperability problems

Get the whole picture – from high level to bit level

Configure send/receive calls for monitoring and analysis (with FaxSend option)

DataProbe T30 Analyzer is a multi-node communication channel test tool for R&D, QA and field service personnel. You can isolate facsimile interoperability problems quickly with DataProbe T30 Analyzer's passive monitoring and protocol analysis capabilities.

With the optional FaxSend utility, DataProbe T30 Analyzer can generate traffic with known characteristics and varying loads to test fax systems. The product's distributed hardware architecture simplifies the task of performing end-to-end testing of facsimile communication systems, and quickly identifies problems caused by the communications network infrastructure.

### Product Configuration

DataProbe T30 Analyzer is a software application that runs on any Windows 2000 or XP workstation. Traffic monitoring is done by a self-contained hardware device called a DataTrap. DataTraps monitor facsimile traffic for detailed analysis. The DataTrap can sit between a fax or telephony gateway unit and an analog interface to the public telephone network or analog switch to monitor and report the communications between the originating and answering fax units.

DataProbe T30 Analyzer software can control one or more DataTraps over TCP/IP. DataTraps connect to the device or network under test via standard RJ-11 telephony connections. Traffic generation is accomplished through use of one or more ChannelTraps used by the optional FaxSend utility to originate and answer fax calls in the same manner as DataProbe T30 Analyzer controls DataTraps.

DataProbe T30 Analyzer has an elegant, easy-to-use interface that displays all captured facsimile protocol data and message content. From a high level view, you can quickly drill down to the bit level. The dynamic ITU-T T.30 help window explains signals, data formats and byte descriptions, that dramatically aid understanding a call error in relationship to fax standards.

With the optional FaxSend utility, DataProbe T30 Analyzer can provide configurable fax transmission characteristics, play specific test scenarios and report protocol violations.

### End-to-End Transmissions

Facsimile calls can be corrupted or degraded as they pass through complex digital and/or analog networks. This can occur as the result of timing delays, dropped packets, or other network anomalies.

DataProbe T30 Analyzer with FaxSend can be used to control multiple DataTraps and ChannelTraps to create an end-to-end test system that plays both the originating and answering parties in fax sessions and monitors each call providing T.30 analysis at all modulations, including V.34. This system identifies protocol violations, fax message degradation and timing errors that result from network signal transport.

### Fax Traffic Volume Problems

Communication servers, routers and other system software can fail when subjected to high volumes of fax traffic. To isolate this type of failure, use DataProbe T30 Analyzer with the FaxSend utility for control of multiple DataTraps and ChannelTraps to generate, monitor and capture fax traffic.

# DataProbe T30 Analyzer

DataProbe T30 Analyzer and FaxSend can be used to generate and monitor fax traffic sufficient to exercise a T1 line (requires sufficient ChannelTraps and DataTraps to simulate and monitor each channel). DataTrap/ChannelTrap units can be distributed in a variety of locations to realistically simulate traffic patterns.

## Field Service Problems

You can easily ship a DataTrap unit or DataTrap/ChannelTrap pair to a site that is encountering a problem, then isolate that problem with DataProbe T30 Analyzer from the home office via a TCP/IP connection(s) to the DataTrap/ChannelTrap. DataTraps and ChannelTraps are easy to ship and setup at remote sites and can dramatically reduce your support travel costs.

## Ordering Information

**T5002-K DataProbe T30 Analyzer Kit** includes the following:

- DataProbe T30 Analyzer Software
- DataTrap Key for T30
- DataTrap2

To create a DataProbe T30 End-to-End configuration, add:

T5002-KEY: DataTrap Key for T30  
F3002-T: DataTrap2

**T5001-KSEND FaxSend Send/Receive Optional Utility Kit** includes the following:

- FaxSend Software
- FaxSend Key
- ChannelTrap III

To create a FaxSend End-to-End configuration, add:

T6000-KEY: FaxSend Key - End-to-End  
F2008-T: ChannelTrap III

## Specifications

### Facsimile Capabilities

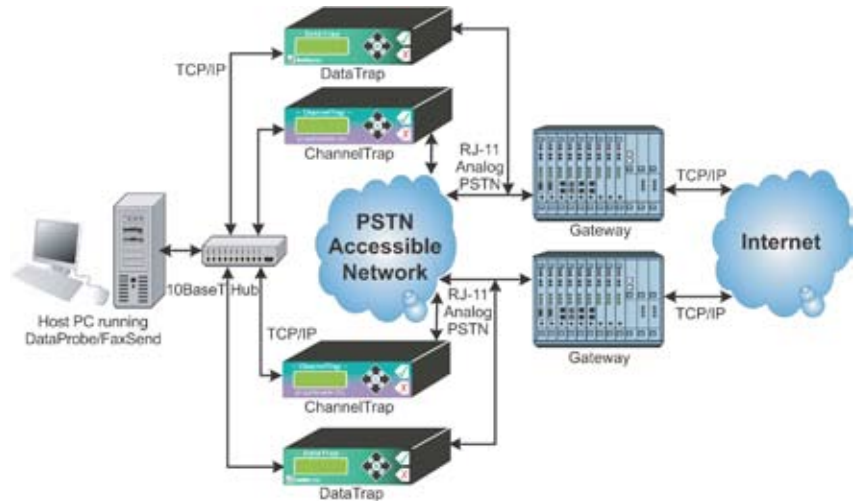
- Support for 2003 ITU-T T.30 Recommendation, including passwords, sub-addressing and use of V.34 modulation
- Facsimile call monitoring, up to 33.6 kbps (with a single DataTrap)
- Post-call analysis of T.4, T.6, T.30, T.81 and T.85 conformance
- Send or receive predefined test fax pages via optional FaxSend utility
- HDLC frame analysis and data decoding
- T.4, T.6, T.81 and T.85 (MH, MR, MMR, JBIG, JPEG) data decoding and data display at all T.30 supported resolutions
- Bitmap viewer for page content

### DataTrap/ChannelTrap Characteristics

- Monitor/capture facsimile calls (DataTrap only)
- Originate and answer facsimile calls (ChannelTrap only)
- External control connection via TCP/IP
- Software configurable
- Browse for DataTraps/ChannelTraps over IP network
- Status display for connected DataTrap/ChannelTrap units

### Operational Parameters

- Linear rather than switching power supplies are provided and required to be used with DataTraps to maintain low noise levels for DataProbe's operation



- DataProbe T30 Analyzer records a Post Detection Signal to Noise Ratio (PDSNR) and displays a graph in the Detailed view. While PDSNR values of 28dB to 30dB will usually allow page decoding, its optimum value is 30dB or above.
- The suggested input power level for V.34 Partial Pages is -13dBm
- DataProbe T30 Analyzer performs all timing analyses at a resolution of 30ms
- Minimum host computer system requirements:
  - Required: PC with 233 MHz minimum (single or dual processor system)
  - Recommended: PC with 500 MHz or higher processor clock speed; Intel Pentium/Celeron or AMD K6/Athlon/Duron or compatible
  - Microsoft Windows 2000, XP, or XP Pro operating system
  - 256 MB of RAM or higher recommended (128 MB minimum supported; may limit performance and some features)
  - 100 MB of available hard disk space for program files
  - Super VGA (800 x 600) or higher-resolution video adapter and monitor
  - CD-RM or DVD drive
  - Keyboard and mouse or compatible pointing device



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