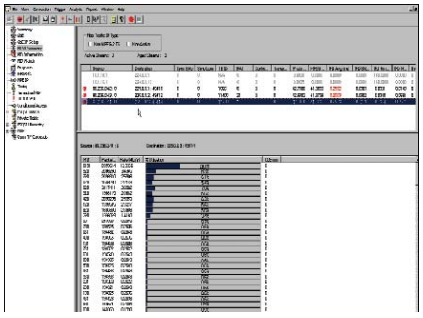
JDSU

COMMUNICATIONS TEST & MEASUREMENT SOLUTIONS

# DTS 330/200 MPEG over Gigabit Ethernet Analysis

## SimulTrak™ application provides simultaneous multi-transport stream analysis



**Highlights**

- **Simultaneous real-time monitoring and in-depth analysis of up to 256 MPEG-2 transport streams within a GbE Link**
- **Full line rate traffic recognition to display 1000-Mbps Ethernet Interfaces**
- **Supports TR101 290 Event logs, triggers and reports for baselining and comprehensive monitoring**
- **Key transport stream parameters are analyzed in real-time (ex. Transport Stream ID, UDP Port, PAT error, Sync loss error, Sync byte error….)**

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### Key Features

- Complete real-time analysis and monitoring to verify stream contents, service plans, PIDs, rates and timing parameters
- Many encapsulation methods supported (UDP/IP, RTP/UDP/IP)
- Analysis of link performance based on filter characteristics in Terminate, Monitor, or PassThrough mode
- Various 1000-Mbps interfaces (Optical/Electrical) available adapts flexibly to varying needs
- Monitor both sides of your "edge" devices (i.e. GbE & QAM) with same equipment
- Identify problems and collect evidence of faulty equipment to maximize response and resolution from vendors and content providers

Network operators and broadcasters are increasingly migrating to high bandwidth digital networks to carry bandwidth intensive services like Video on Demand (VOD) and High Definition Television (HDTV). These new networks bring a significant increase in the volume and complexity of broadcast equipment.

Additionally, network maintenance is more critical as delivering high quality service is key to retaining subscribers. One such newly emerging technology allows Digital Video signals carried within MPEG-2 transport streams to be carried over Gigabit Ethernet networks. To aid in understanding this new digital technology, and to make test and monitoring easier, JDSU designed the Gigabit Ethernet Interface for their TruStream™ DTS 330, DTS 200 and new Digital and IP Video Service Monitoring System. It is intuitive, flexible, easy to use and enables the analyzing of not only IP parameters but also MPEG parameters.

In addition, JDSU has now introduced the SimulTrack application which allows operators to simultaneously analyze and/or monitor literally hundreds of MPEG transport streams encapsulated within a Gigabit Ethernet link. Key MPEG and IP layer parameters are simultaneously viewed and analyzed. This new capability provides network operators the visibility they need to view live video traffic in real-time.

SimulTrack provides insight into the entire bandwidth of a Gigabit Ethernet network at full line rate. With easy-to use displays, a user can plug in the instrument at the Point of Interest and be up and running quickly and find issues within a matter of minutes. In addition, the SimulTrack application also provides very useful Ethernet Layer statistics that can be used by the operator to troubleshoot any IP layer issues. Since the Digital content traversing trough a System Operators' internal network is converging to an IP routed multicast / unicast system, the ability to quickly identify routing problems is critical. With the Source and Destination information of each Transport Stream within a Gigabit Ethernet network being easily accessible within the Transport Stream Auto Detect (TADTM) view of the DTS, the SimulTrack application enables finding and fixing common routing problems to become as easy as 1-2-3. This application allows network operators to more cost effectively detect and isolate network problems and this helps optimize operations and allows issues to be proactively resolved before they reach the customer.

Call JDSU today for a demonstration or for more product information.

# Specifications

## General Specifications

***General Gigabit Ethernet Interface Specifications***

| | |
|---|---|
| Interface Type | GBIC Based Interface (SX, LX, ZX, TX) |
| Duplex Modes | Full/Half |
| Modes of Operation | Terminate (Auto/No-Auto Negotiate), Monitor, PassThrough |
| Traffic Filter | Source and destination MAC, IP address, UDP Port, Type of Encapsulation, and VLAN ID |

***Key IP Layer Results***

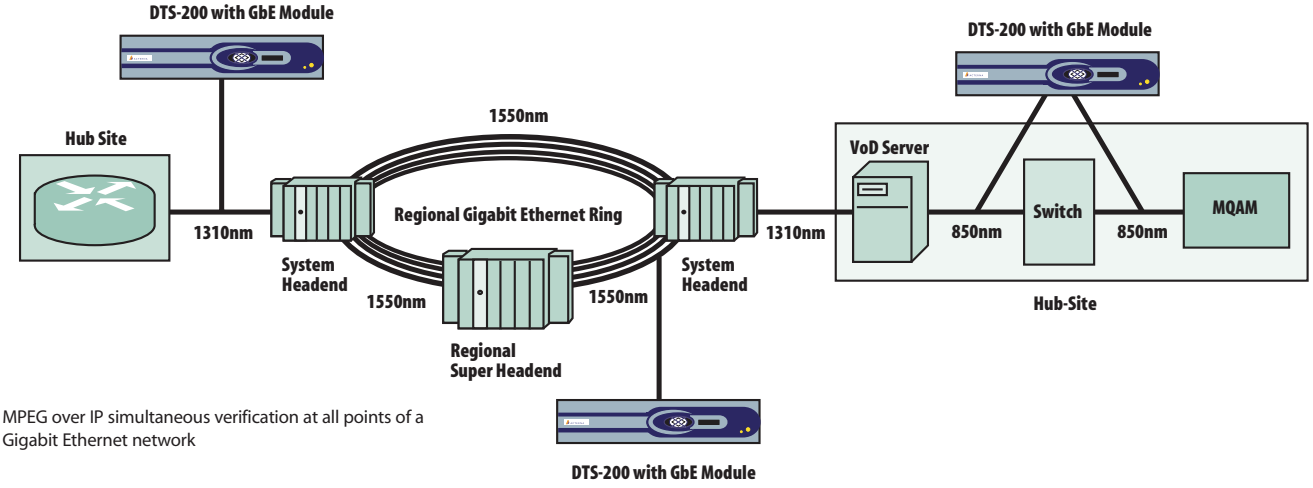
| | |
|---|---|
| Link Status | Loss of Signal, Link Active, Frame Detected |
| Auto-negotiation status | Link Config ACK |
| Link/Frame statistics | Bandwidth Utilization, Frame Length, Total Frame Rate, Jumbo Frames, Pause Frames, FCS Errored Frames, Jabbers, Runts, Undersize Frames, Oversize Frames |
| Packet testing in Conformance with | IETF RFC 1242, RFC 2544 |
| IP Traffic Info | Display the source and destination info (MAC, IP address, Port, Encapsulation) for every Transport Stream in the IP network |
| TS IP Layer Info | Min, Max, Mean, and Std. Deviation of Inter-Frame Delay and Frame Count of TS |

***Key MPEG Results***

As specified in the main DTS product literature

## Ordering Information

| | |
|---|---|
| ***SimulTrack™ Application Modules*** | |
| DTS-200 SimulTrack Application Module | I7553/9255 |
| DTS-330 SimulTrack Application Module | I7554/9327 |
| ***Gigabit Ethernet Interfaces*** | |
| DTS-200 GbE Ethernet Interface | I7553/9212 |
| DTS-330 GbE Ethernet Interface | I7554/9288 |
| DV_SMS SimulTrack Standard Probe | I7556/9102 |
| ***DTS Packages with Gigabit Ethernet Option*** | |
| DTS-200 Annex B Cable TV Package | I7553/11 |
| DTS-330 Annex B Cable TV Package | I7554/1111 |
| ***Additional Gigabit Application Modules*** | |
| DTS-200 GbE FrameRecord Module | I7553/9254 |
| DTS-330 GbE FrameRecord Module | I7554/9326 |




MPEG over IP simultaneous verification at all points of a Gigabit Ethernet network



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