## TANDBERG Television

Real-time monitoring and analysis of MPEG-2 networks is functionality in increasing demand in the broadcasting industry. The need arises from an everincreasing complexity in MPEG-2 networks, as well as higher uptime expectations to the provided services.

The TANDBERG Television TT4000 Transport Stream Monitoring family is designed for fulfilling this need. The products are versatile monitoring units with features aimed at real-time surveillance applications. The product family is implemented at a cost level allowing for multiple monitoring points within an MPEG-2 network.

# TT4010 STREAM PROBE TRANSPORT STREAM MONITOR

The TANDBERG TT4010 StreamProbe is a unique, portable tool for monitoring of MPEG-2 Transport Streams. Its ability to display stream contents and detect errors in real time makes it ideal for use during system installation and testing. Thanks to the WEB-based user interface, you can access the probe with any computer supporting a WEB browser.

The TT4010 StreamProbe can be easily carried around in a TS transmission chain in any digital TV network to help operators locate errors and ensure consistent Quality of Service.

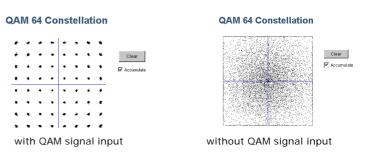
- · Handy size
- · Cost-effective real-time TS Monitor
- User-friendly presentation interface via a standard WEB browser



#### **Key features**

- Supports both DVB and ATSC specifications
- DVB ASI and optional QAM Annex A input interface options
- Error detection according to ETR290 specification
- · Bit-rate alarms
- TS / Service / PID analysis
- PSI / SI (DVB) and PSIP (ATSC) table analysis
- Ethernet (TCP/IP) remote control interface
- · Web-based interactive user interface
- Internal alarm / event logging
- Alarm relay

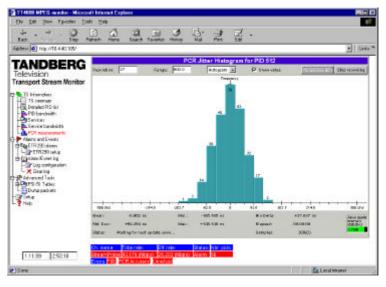
#### **QAM** constellation diagram



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### TT4010 STREAMPROBE **TRANSPORT STREAM MONITOR TECHNICAL SPECIFICATION**

INPUTS	DVB ASI / M2S  • Max 50Mbit/s  QAM Demodulator (Annex A)  • Channel Bandwidth:  8MHz  FOR 2 (ANNE)
	<ul> <li>Tuner frequency range: 50 – 860MHz</li> <li>Input signal level/channel: 30 – 100dBuV</li> </ul>
OUTPUTS	DVB ASI / M2S (active loop-through from input)
FEATURES	Error detection according to DVB ETR290 specification for real time monitoring of MPEG-2/DVB TS Internal alarm / event logger TS analysis  • Shows all present PIDs • Monitoring of total and effective bit-rate • Detection of DVB ASI packet length Service analysis  • Shows Service IDs, names and components (based on PSI/SI or PSIP analysis) • Graphical view of service bit-rates including detection of min/max values. Dynamic updating • Service oriented alarm reporting PID analysis • Graphical view of individual PID bit-rates including detection of min/max values. Dynamic updating • PCR jitter measurements, including real-time graphical view of PCR jitter distribution • Scrambling detection Decodes PSI/SI/PSIP tables (shows fully decoded table syntax and hex tables) Configurable alarm relays Remote monitoring QAM constellation diagram
CONTROL	10Base-T Ethernet interface TCP/IP protocol support Remote control from Internet Explorer / Netscape Web Browser (must support JAVA)
PHYSICAL / POWER	Input voltage: External power, 6V/12V DC Dimensions: (W x D x H) 170 x 290 x 43mm (6.7 x 11.4 x 1.7 inches)
ENVIRONMENTAL CONDITIONS	Operating Temperature: 0°C to +45°C (32°F to 113°F)  Storage Temperature: -20°C to +70°C (-4°F to 158°F)  Relative Humidity: 5-95% (non condensing)
QAM spec.	Signal format: QAM-4, QAM-16, QAM-32, QAM-64, QAM128 and QAM-256 mode.



TANDBERG and device, are either TMs or RTMs of TANDBERG Television and subsidiaries in one or more countries worldwide

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