

# Surveyor™ TS Compact

## Portable, Real-Time QoS Monitoring for Edge or Access IP Networks

Validating the video delivery performance properly across edge, access, and home networks is a complex challenge. When something is wrong, you need to have the capability to quickly identify where and why it happened, and then address the issue before it impacts the viewer experience putting your revenue at risk.

Video content that traverses IP networks can expect packet loss impacting the quality of video delivered. To quantitatively measure QoS, several related aspects of the network service are often considered, such as data loss, availability, error rates, bandwidth, throughput, transmission delay, jitter and others.

By monitoring your video network's performance with Media Delivery Index (MDI), Program Availability, and ETR 101 290 parameters, you can quickly detect, identify, and resolve problems that could impact the viewer's experience and effectively manage that risk.

Surveyor TS Compact (TSc) is a portable, scalable probe that provides comprehensive QoS monitoring for MPEG-2 transport streams. Designed for edge, access networks, and remote deployments, Surveyor TSc provides continuous, real-time monitoring and deep packet inspection of up to 500 programs of video traffic, measuring and alarming on QoS metrics for each program. Surveyor TSc is designed to locate impairments as they happen and produce actionable insights that allow you to address issues before they impact the viewing experience.

Surveyor TS Compact can be used stand-alone or as an integral component in Telestream's iQ Linear end-to-end solution providing 24/7 confidence monitoring from head end to customer home. Its remote QoS monitoring and scalability is ideal for proactive monitoring at the edge, within the access network or in the home keeping you informed on content accessibility and video delivery performance.

Residential home networks have become more complex making it difficult to identify whether the problems are in the home or in the access network. All too often when a technician is on-site, the problem does not manifest. Telestream's Surveyor TSc system's reduced form-factor means that it can be conveniently installed at the customer premise and remotely accessed over a longer time. This capability allows technicians to observe and troubleshoot problems when they happen.

#### **Key Benefits**

- Accessibility verification, ensuring the content is accessible at each location across the distribution and access network.
- Proactive visibility into the performance of video streams at any point from Edge networks (Hub, Central Office, and local serving offices) to Access networks.
- Availability measured in the access network for each program to identify issues before customer impact.
- A portable tool for technicians to solve problems in the access network or in the home reducing truck rolls and on-site maintenance costs.



#### **Features**

- 24/7 or scan monitoring of transport streams with program-based multi-level drilldown into per PID statistics for rapid fault isolation and reduction of mean time to diagnose (MTTD)
- Real-time, line rate monitoring and measurement of up 2 Gbps of video traffic and up to 500 programs with up to 128K PIDs, sized for edge and access network applications
- Provides per-program Availability metrics
- RFC 4445 Media Delivery Index (MDI) metrics for IP distribution monitoring
- QoS monitoring for MPEG-2 Transport Streams supporting the following CODECs and others:
  - MPEG-2
  - MPEG-4
  - AVC/H.264
  - HEVC/H.265
- Per program Audio, Video, and Control PID Alarming
- Open API for user access to the Surveyor TSc metrics and information
- PSI/SI/PSIP table decode and display
- Continuous analysis of TR 101 290 priorities 1, 2 and 3 on all monitored IP transport streams
- Detection of SCTE-35 program insertion signals for validation
- Support for new Remote PHY Distributed Access Architecture
- Support for IPv6 addressing on the media ports
- Unicast, multicast, and broadcast support for comprehensive stream handling
- Triggered capture of impaired video for post analysis
- 802.1Q VLAN tagging support, selection, and detection
- Configurable alarm handling including severity level definitions
- SD, HD, and UHD support to handle all your video
- Uses Lightweight Directory Access Protocol (LDAP) for user authentication
- Browser-based User Interface with multi-user access
- IGMPv2 and IGMPv3 SSM support
- IPv6 capable
- An acquisition element of Telestream's IQ Linear Broadcast Platform

#### **Product Specifications**

- Compact Appliance AC Power Only
- Licensable Monitoring Capacity options:
  50 to 500 programs in increments of 50 programs
- Data Extract API and R-PHY Monitoring are licensable options
- 2 RU 19" rack mount option available holds up to two units
- Micro-USB port for Out-of-Band management

### **Appliance-based Specifications**

Description	Specification
Dimensions (width x height x depth)	208 cm x 52 mm x 200 mm (8.1" X 2.0" X 7.9")
Weight of chasis	1.4 kg (3 lbs.)
Power Consumption	20 Watts typical*, 30 Watts maximum
Power (External AC/DC Power Supply)	Input: 100-240V AC, 2.0A, 50/60Hz Output: 12V DC, 65W
Media Connection (Monitoring ports)	two RJ45 10/100/1000 Base-T Ethernet ports or two SFP+ 10/100/1000/10000 Base-T Ethernet ports
Management Connection	one RJ45 10/100/1000 Base-T Ethernet port