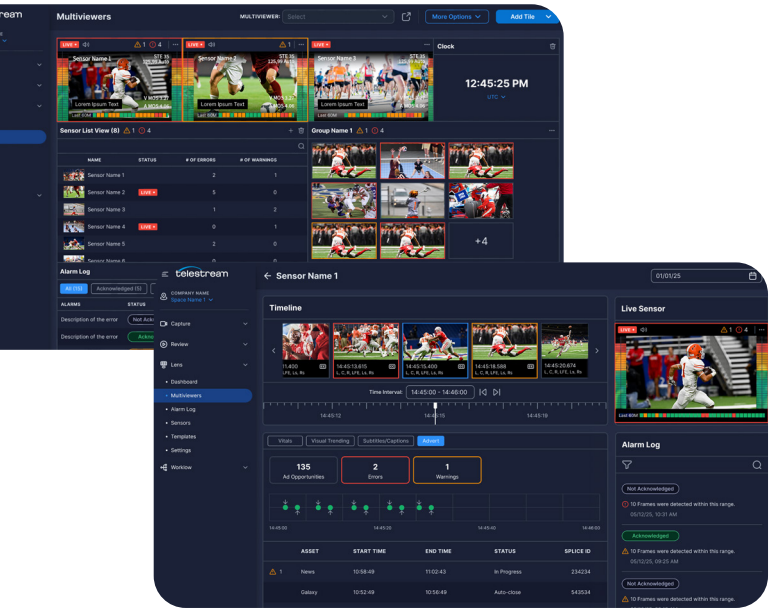
Telestream UP.Lens

See Every Feed. Solve Every Issue.
Trust Every Moment.



Executive Summary

The shift to cloud-native live production is often hindered by a "visibility gap", where traditional monitoring is too rigid for elastic workloads and DIY dashboards lack actionable depth.

Telestream **UP.Lens** is the first cloud-native monitoring service that fuses broadcast-grade multiviewer confidence with the deep, historical analytics of enterprise observability.

Purpose-built for ground-to-cloud contribution, UP.Lens enables live production teams to dynamically deploy live video monitors in the cloud, visualize every contribution feed in real-time and drive insights on stream health issues the instant they appear, all within the Telestream UP.

The UP.Lens Advantage

	Lens Capability	Technical Value	Business Impact
Live Multiviewer & Analysis	**High-Fidelity Signal Overlay:** Instant visibility to validate content and correlate network Transport performance (Jitter, Packet Loss, SRT errors) with quality (audio/video MOS, PCR Jitter, Buffer Occupancy, CC errors).	**Rapid Fault Isolation:** Enables immediate detection of whether "macroblock" artifacts are caused by congested cloud-egress paths or source encoder over-subscription.	**Predictive Operations:** Transition from "break/fix" to a **Never-Fail** paradigm with early-warning alerts that catch degradation before it impacts the viewer.
Forensic Troubleshooting	**Continuous Telemetry Archive:** Comprehensive time-indexed buffer of raw KPI data, performance alerts and visual snapshots for every contribution feed.	**Deterministic Root Cause:** Eliminates "aliasing" and data sampling gaps, allowing engineers to reconstruct transient incidents with frame-accurate precision.	**Reduced MTTR & Accountability:** Accelerate resolution by up to 60% and provide definitive proof for performance SLAs, eliminating "finger-pointing" across hand-off points.
Complete Policy Compliance	**Always-On Policy Monitoring:** Automated tracking of ad-marker (SCTE-35) propagation, audio loudness levels (CALM/ EBU), and caption/subtitle performance.	**Monetization & Regulatory Enforcement:** Ensures that critical commercial and quality standards are being maintained at every hand-off point in the delivery chain.	**Revenue Protection:** Drastically reduce costly make-goods and avoid regulatory fines by ensuring every feed is correctly decorated to support the video business.
Cloud-Native Architecture	**Elastic Provisioning:** SaaS-native monitoring deployment (<45s spin-up) with automated lifecycle management via API or self-serve UI.	**Right-Sized Infrastructure:** Replaces rigid, "always-on" hardware probes with dynamic monitoring that scales horizontally with your event calendar.	**Optimized Unit Economics:** Align monitoring spend directly with production volume; reduce idle cloud overhead through simple consumption-based scaling.

UP.Lens Core Services

UP.Lens Multiviewer: Real-Time Visual Assurance

Overview: Provides immediate "eyes-on-glass" confirmation of stream health across hundreds of concurrent feeds

Key Features

- Customizable mosaics, low-latency WebRTC playback, and automated penalty-box sorting
- Leverages low-latency WebRTC for proxy-frame delivery, ensuring operators see frame-accurate views across contribution feeds
- Integrated "Penalty Box" logic uses per-second triggers to automatically promote streams with errors like discontinuities or PCR Jitter to the primary focus tile

Ideal For: MCR Operators, Live Producers, and Remote Production Teams

UP.Lens Visual Trending Analytics: The Forensic Time Machine

Overview: Fuses real-time alerts with a continuously indexed history of performance KPIs and quality metrics

Key Features

- 10-day incident rewind with trend analysis and deep signal diagnostics
- Deterministic State-Recovery: Unlike standard time-series databases that average data, the Lens "Time Machine" maintains a continuously indexed circular buffer of raw KPI telemetry (Stream performance, SCTE-35 messages, Inter-arrival Jitter, Perceptual Quality, etc.)
- "Post-Mortem Correlation," overlaying visual performance with sub-second TS-level metrics
- Rapid identification and RCA analysis to prove where and why an issue happened, for example if a video freeze was a source-encoder GOP-structure failure or a transit-layer packet-loss event

Ideal For: Engineering Leads, NOC Managers, and RCA Analysts

UP.Lens Orchestration: Elastic Cloud Provisioning

Overview: Automates the lifecycle of monitoring sensors within Telestream-managed or customer-owned VPCs

Key Feature: <45-second sensor spin-up/recovery and usage-based automated teardown

Ideal For: Cloud Architects, DevOps Engineers, and Media Supply Chain Architects

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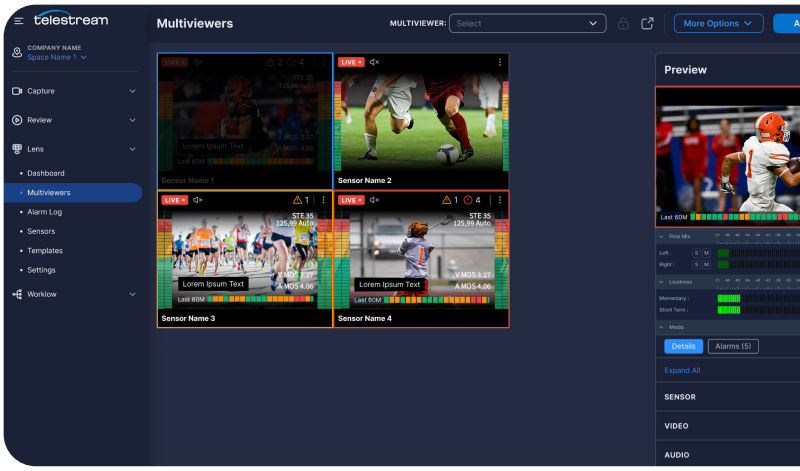
Technical Specifications



Lens Sensor

- Transport Protocol: SRT
- Container Formats: MPEG-TS
- Video Codecs: h.264 (AVC), h.265 (HEVC)
- Audio Codecs: AAC, MPEG Audio, PCM, AC3

Forensic Time Machine

- Continuously indexed history of dozens of performance, monetization and compliance KPIs. One-click transition from a live visual impairment (e.g., frozen frame) to the historical packet loss trend that caused it.
- *Elastic Multi-Domain Sensors:* Just-in-time provisioning of right-sized sensors (QoS, QoE, or combined) that can be deployed within the **Telestream Unified Platform global cloud infrastructure.**
- *Zero-Blind-Spot Multiviewer:* A cloud-native WebRTC multiviewer with **<500ms latency** that includes an automated **"Penalty Box"** widget to instantly surface at-risk feeds.
- *Ad-Sequence & Compliance Validation:* Real-time monitoring of **SCTE-35** integrity, loudness consistency (CALM/EBU), and caption/subtitle performance.
- *Rapid Service Onboarding:* Target spin-up time for new contribution feeds averages **45 seconds**, supporting the agility required for live event spikes.

The Bottom Line: From Observability to Certainty

In the high-stakes world of cloud-native live production, simply seeing a failure is not enough—you must be able to prevent the next one. Telestream UP.Lens bridges the gap between real-time confidence and historical truth, transforming your operations from a reactive "break/fix" cycle into a proactive Never-Fail paradigm. By fusing broadcast-grade multiviewer monitoring with a forensic "Time Machine," UP.Lens ensures that your team spends less time hunting for problems and more time delivering flawless viewer experiences.

Learn more about UP.Lens:
telestream.com/up-lens

.Lens

Stop guessing. Start knowing.
Secure your cloud contribution with UP.Lens.
Contact us at telestream.com/contact-us