

# Inspect 2110

IP Video Monitoring for your ST 2110 Production Network

Ensure IP video production networks operate as expected with Inspect 2110 monitoring.

# Introduction

Inspect 2110 monitors ST 2110 IP video networks providing the automated visibility and diagnostics operations teams need. Broadcast production is changing from SDI to IP video bringing several benefits in flexibility, scale and efficiency. However that flexibility brings operational challenges to ensure the IP video network is working as expected.

# Inspect 2110 features



Confirm video streams are present and correct including format, video, audio, and data



Ensure redundant video streams are the same and healthy



Check that PTP synchronization is correct and operational



View network traffic and identify QOS trends



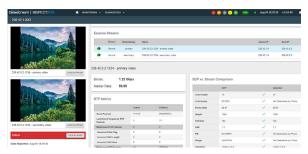
Click to launch video stream on PRISM for detailed analysis





## **IP Video Monitoring**

Inspect 2110 monitors ST 2110 video streams across a production or contribution network to make sure they are present and healthy. A notification will be triggered if the format of the video, audio or data has errors or differs from the SDP file. Thumbnails provide visual feedback of the video quality, with status icons that include mouse-over alert messages and a direct link to diagnostics.



# Redundancy and SDP File Checks

To help video operations, Inspect 2110 can compare the SDP file to the actual ST 2110 video streams running on the IP network. In addition, redundant video streams are compared, including ST 2022-7 support, to ensure both streams match and are operating as expected. Easily view redundant stream thumbnails and comparisons, and get alerts by exceptions of mismatch issues.



## **High Performance**

Inspect 2110 supports up to 100Gbps of monitoring capacity across dual 100G Ethernet interfaces. It uses a software container-based architecture for high performance and future cloud deployments. Developers will appreciate the API-first design for automation, and that the easy to use Inspect 2110 web UI uses the same API.



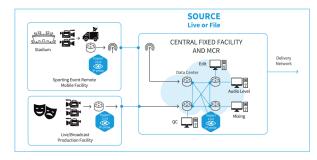
## PRISM Connection for ST 2110 Analysis

Simplify operations of ST 2110 video networks by combining Inspect 2110 monitoring with PRISM waveform monitor. Inspect 2110 provides scalable video network monitoring by exception and includes a 'click-to-view in PRISM' button to automatically launch any stream in PRISM for deep ST 2110 video waveform, audio, data and PTP analysis.



## **PTP Timing**

PTP timing and synchronization is critical for IP video networking, and Inspect 2110 collects PTP performance metrics and confirms the video network is properly synchronized. Inspect 2110 simplifies automated detection of PTP issues and diagnostics, saving time and reducing errors.



## **IQ Solution Family**

Inspect 2110 is the latest addition to the market leading IQ video quality assurance product family. With the addition of ST 2110 monitoring, broadcast operations and network distribution teams have a complete range of video workflow monitoring solutions from ST 2110 source through ABR OTT streaming services.



## **Specifications:**

## Capacity

Monitor up to 100Gbps bandwidth across 1 or 2 100Gb Ethernet ports

## License

Program-count based licensing

## **Protocols**

- ST2110-20
- ST2110-21
- ST2110-30
- ST2110-40
- ST2022-7

# **PTP Timing**

- PTP v2
- ST 2059-1

## Video format

- Resolution: SD, HD, Full HD, 4K UHD and 8K UHD
- Sampling: YCbCr-4:2:2 (for thumbnails & mosaic)
  10-bit, 8-bit

## Audio format

- PCM/ AES67
- 48, 96 kHz
- 16-bit, 24-bit sample

#### Web UI

- Web-based user interfaces supported (version tested)
- Google Chrome (76.0.3809)
- Microsoft Edge (18.17763)
- Mozilla Firefox (68.2)

## API

- REST API-first design
- Includes configuration, data metrics and thumbnails

## **Alerts**

- Northbound alerts or SNMP interface for NMS/OSS integration
- Web Push API
- Web Sockets
- SNMP v3
- Amazon SNS

# Appliance

- 1RU High Performance Server
- Two monitoring ports 100GbE/40GbE QSFP28
- One management port 1GbE
- Dual Intel Xeon-class CPU
- 64GB Ram
- 960GB SSD
- Dual Redundant Hot Plug Power Supply, 550W each

