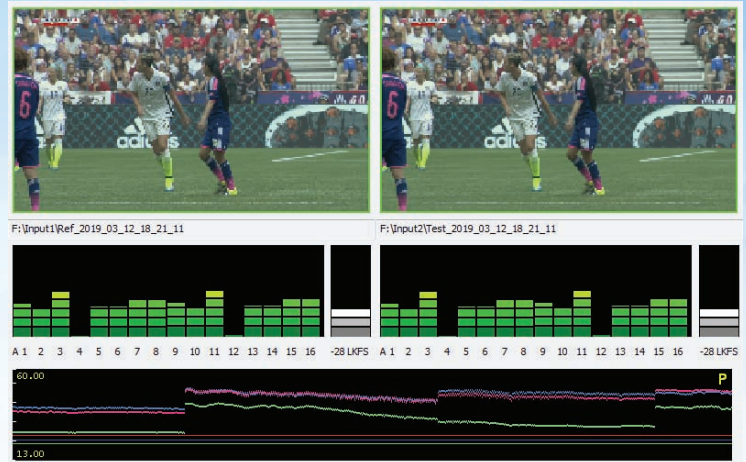


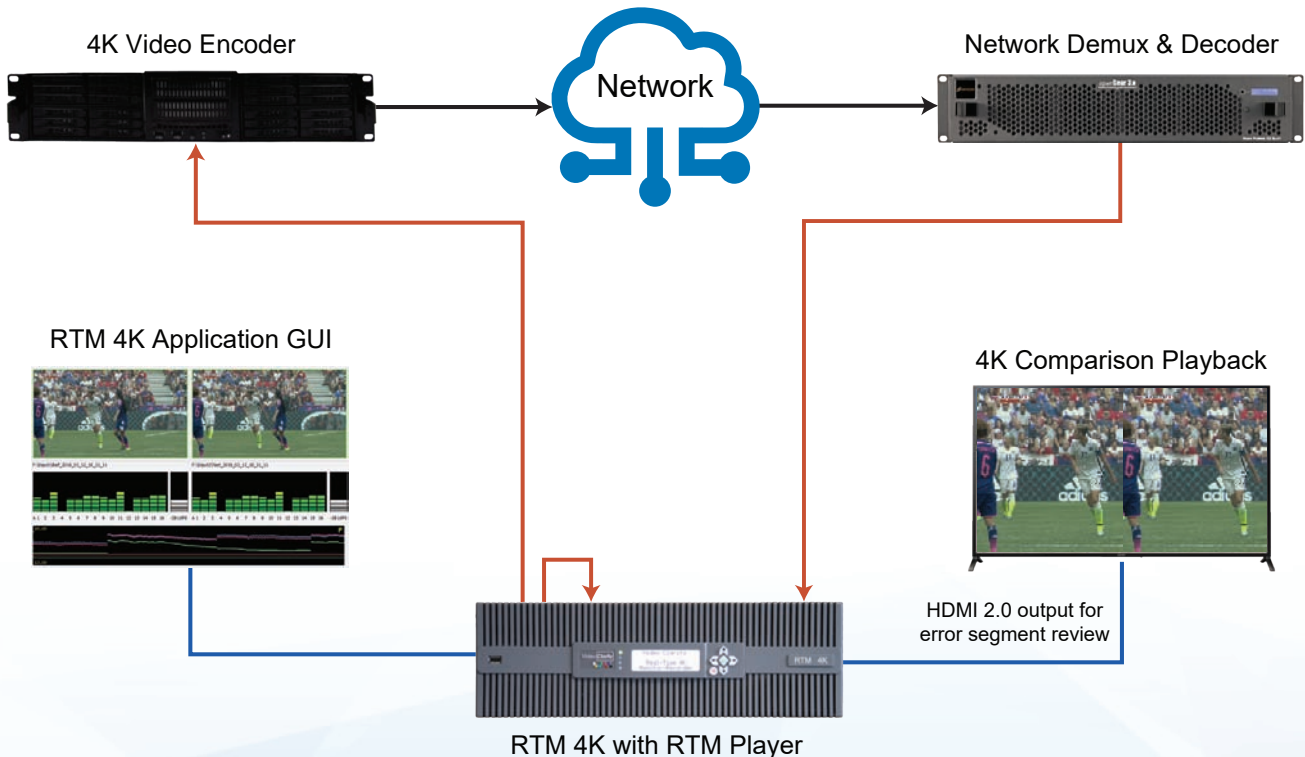
## RTM 4K - Real-Time 4K Device And Network Quality Testing

A real-time test of audio and video quality provides users with significant benefits including...

- The ability to perform long term quality testing on fully uncompressed video and audio for any length of time.
- A full-reference test that compares video and audio source to a return channel after processing so that highly accurate measurements and fault thresholds can be applied for automatic event recording.
- Quality measurements that are not influenced by the creative effects applied to source video material, saving valuable time and effort with no false positives for every test run.



The RTM 4K applications include uncompressed 12G, 6G, and 3G SDI device testing, encoder/transcoder testing, network path testing, and set top box or handheld device media testing for up to 4Kp60 resolution video with associated embedded audio and ancillary data. It will perform a real-time video PSNR or DMOS along with audio quality, lip sync, audio program loudness metrics simultaneously with VANC line data accuracy test. The included RTM Player provides recorded error event playback as well as a source output to the device test chain without the use of external video hardware.



## Real-Time Quality Testing for Network, Encoder, Transcoder, and Handheld Devices

## RTM 4K Features

- RTM 4K GUI provides visual thumbnail of source and test video inputs with instant test score updates
- RTM Manager provides browser control with real-time score graphs for video quality and lip sync tests
- RTM Player allows drag and drop of test logs for comparison playback of recorded error sequences
- PSNR or DMOS (with MS-SSIM algorithm) is selectable as the video quality test in RTM 4K
- aFreq is applied for audio performance and lip sync measurement with audio/video offset thresholds
- aPeak is applied for LKFS audio program loudness measurement with min and max thresholds
- VANC data check is selectable per line and is measured for data payload accuracy

## RTM 4K System Model: RTM-S8085



**Model: RTM-S8085**

**Storage:** 8.0 TB

**Power:** 100 - 240VAC, 47-63Hz, 600W Max

**GUI Display Output:** DisplayPort or HDMI

**Includes:** RTM System Guide PDF, 3RU rack kit, keyboard, mouse, 5 HD-BNC to BNC cable kit, HDMI output cable, USB to GNIC adapter, RTM Log Grapher, RTM Manager, Scheduler, Command Line API, REST API

**Video I/O:** SMPTE 259/292/296/424/425/2082

- 4 12G-SDI programmable interfaces (HD-BNC)
- Input source & test signals up to 2160p 60Hz each
- 1 HDMI 2.0 4K video & audio playback output

**Audio I/O:** 24 bit, 48 KHz

- 4 12G-SDI programmable interfaces (HD-BNC)
- 16 channels of embedded audio per HD-BNC
- Dolby® Digital Plus (input decoder incl.) or PCM
- Option:** CV-Importer for media file ingest

**GNIC IP Inputs For HD or SD Testing and Control Use:**

- 2 - 1000baseT - RJ45
  - 1 - 1000baseT - USB/RJ45
- Dimensions: 17" W x 5.25" H x 20.15" D (3RU)  
43 cm x 13.5 cm x 51.4 cm

Weight: 31 lbs, 14.1 Kg  
Operating Temperature: 0 - +40 Celsius  
Storage Temperature: -20 - +50 Celsius  
Relative Humidity: 5-95%, non condensing

**RTM Player:**

Included RTM Player for playback of source video during RTM testing

**Includes:** HD-BNC loop cable

**Video Output:**

-Playback with supplied loop back cable to source input for 4K, HD, or SD video format testing in RTM

**Reference Input:** Black burst or tri-level sync on HD-BNC

**Control:** Via RTM Player GUI, Command Line, or REST API

**Digital Video Formats:** 525i 59.94Hz, 625i 50Hz, 720p 60, 59.94, 50Hz, 1080i 60, 59.94, 50Hz, 1080p 60, 59.94, 50, 30, 29.97, 25, 24, 23.98Hz, 2160p 60, 59.94, 50, 30, 29.97, 25, 24, 23.98Hz

**Digital Audio:** 16 channel, 24bit, 48KHz PCM, or DD+  
**VANC:** All VANC lines playback