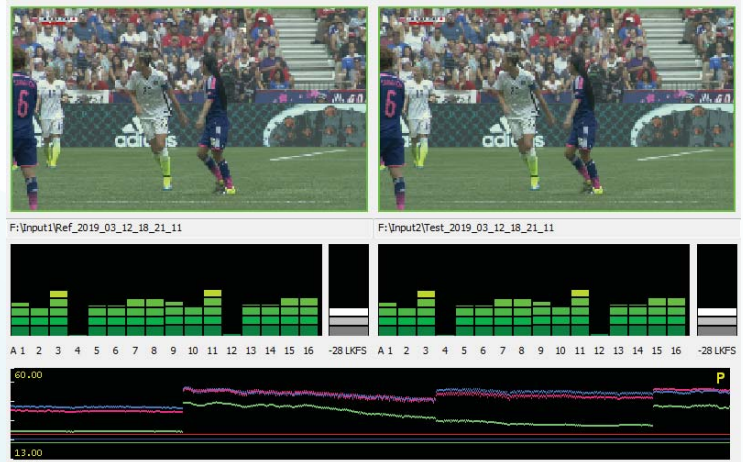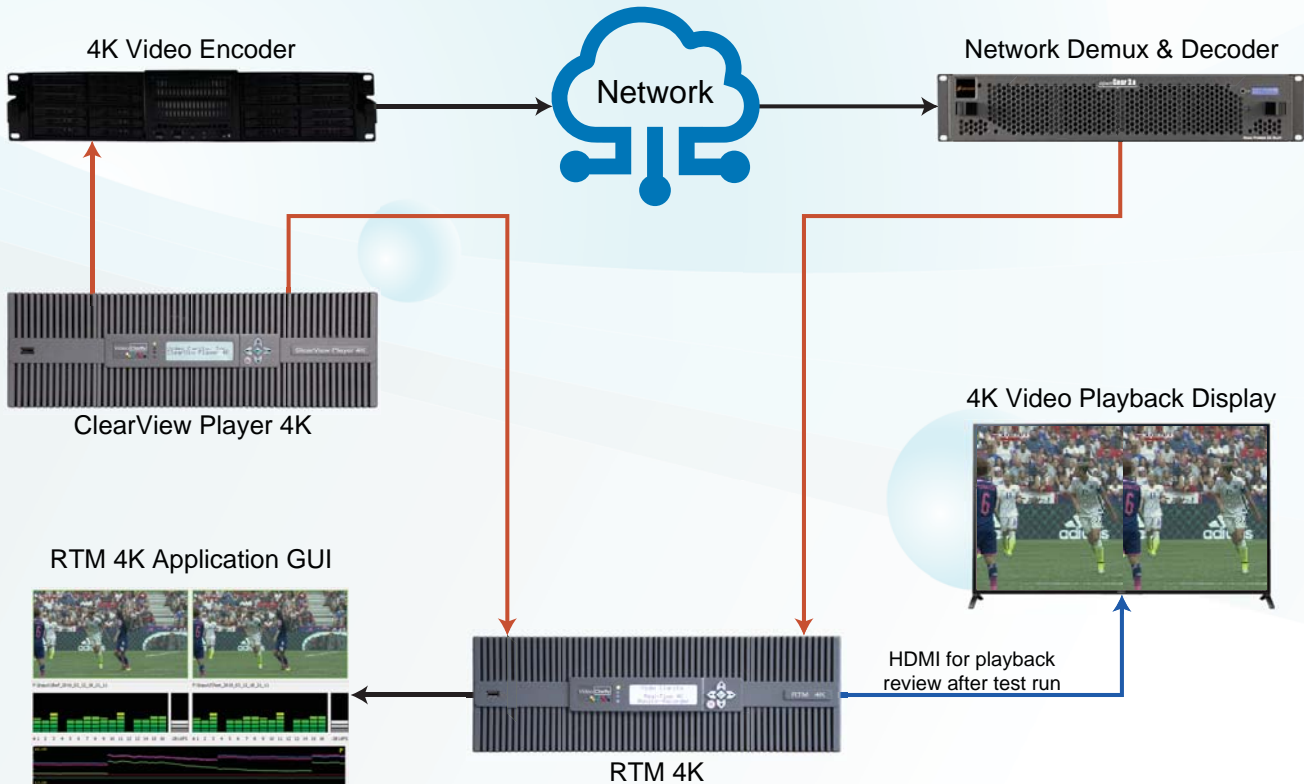## RTM 4K - Real-Time 4K Device And Network Quality Testing

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 presents a significant technological breakthrough by applying a fully uncompressed 4K video source with embedded audio and performing a real-time video PSNR or DMOS via comparison to a 4K encoded/decoded signal input along with audio quality, lip sync and audio program loudness measurements at the same time.

Real-Time Quality Testing for Network 4K Encoder or Transcoder

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 4K 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 Log Grapher provides continually updated selectable measurements with timeline pan & zoom.
- RTM Scheduler runs the RTM application on a test schedule with start time and test length per job.

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: Printed manual, 3RU rack kit, keyboard, mouse, 5 HD-BNC to BNC cable kit, HDMI output cable, USB to GNIC adapter, RTM Log Grapher, RTM Manager, and RTM Scheduler

Video I/O: SMPTE 259/292/296/424/425/2082
- 2 12G-SDI inputs, 2 12G-SDI outputs (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
- 2 12G-SDI inputs, 2 12G-SDI outputs (HD-BNC)
- 16 channels of embedded audio per HD-BNC
- Dolby® Digital Plus (input decoder incl.) or PCM
- 1 analog stereo alarm output - stereo mini

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