



# Sentry Family Software Update version 5.0

Tektronix announces the release of software version 5.0 for its Sentry family of products. A key challenge for Cable Operators involves programs that have a good QoE score, but are experiencing deep content errors due to over-compression. Artifacts from over-compression are particularly noticeable during high motion scenes common in sports programs. Effective MOS (eMOS) is a new measurement that detects errors, such as blockiness, related to over-compression. This new measurement can also be associated with QoE scores if desired. Customers can reset expectations on their benchmark QoE scores to include eMOS (Perceptual Video Quality, or PVQ measurements), depending on the makeup of their installed base. The key to delivering this new video artifact measurement and detection capability was the development of a unique set of algorithms that are calibrated against the Tektronix PQA600 Picture Quality Analyzer. Sentry PVQ is the industry first and only “non-reference” MOS that is fully calibrated with the Tektronix PQA DMOS (Differential MOS) - the industry’s most trustworthy picture quality test and measurement standard used by leading encoder manufacturers worldwide.



Sentry is now the only video network monitoring system that can perform PQA/DMOS calibrated effective Mean Opinion Scores (eMOS) with zero reference, on hundreds of HD/SD programs at any point in the network, in real time 24x7 and at full line rate. Unlike the blockiness analysis in the VQS1000, the PVQ measurement in Sentry is like having *hundreds* of people each looking at different HD/SD programs all the time, and scoring them based on their perceptual video quality in real time.

## Feature & Benefit Summary

Feature	Benefit
Sentry & Sentry Verify line rate support	Higher monitoring density means less rack space and fewer physical monitoring ports required, with less power consumption
Sentry & Sentry Verify 100 Transport Stream support	More TS support means more bandwidth to monitor in the same chassis, especially for SPTS monitoring
Sentry Perceptual Video Quality (eMOS)	Detect and quantify how/when non-MPEG errors (e.g., over-compression) are affecting viewers' perceived quality of experience – and being able to optimize video quality and fix problems quickly
Video QoE reason code enhancements	A more granular classification and comprehensive descriptions explaining the root cause of video problems
Sentry Edge RF tuner parking capability	Reduce mean time to detection of RF or TS issues on certain QAM channels by “fixing” one or both tuners to monitor these channels, as opposed to automatically round-robin the entire channel line-up.
GOP length statistics (max, min, avg)	When certain versions of set top boxes are known to have problem handling long GOP video, this feature provides user a fast and convenient way to uncover these issues and to fix them quickly.
Sentry & Sentry Verify RTP support	Extending Sentry product line monitoring capability to RTP (on top of UDP) network.

Contact your Tektronix Sales Engineer to arrange for a software upgrade.