

PESQ LQ/LQO/WB (ITU P.862/ P.862.1)

PAMS LE/LQ (ITU P.800)

PSQM (ITU P.861) and PSQM plus

VQT over VOIP, PSTN, ATM, Frame Relay, Wireless Networks

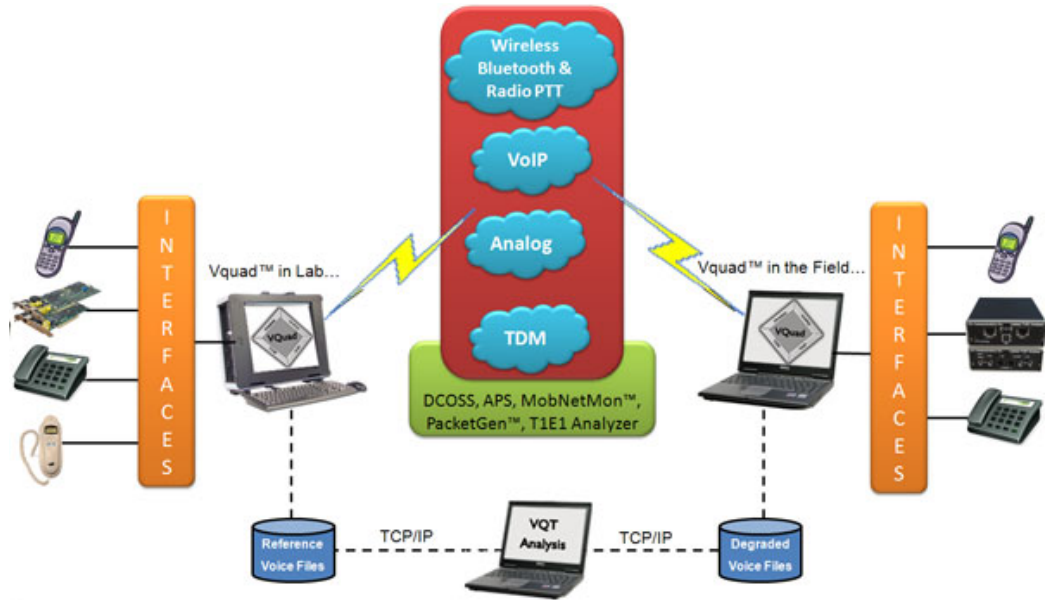
Measure Effects of Noise, Delay and Echo in Networks

Measure Effects of Packet Jitter in VOIP Networks

Compatible with VQuad™, DCOSS, T1/E1 Analyzer, MobNetMon™, PacketGen™

Manual or Automatic Operation with automatic result logging

Voice Quality Testing (VQT)



Providing clear, uninterrupted voice is critical in Network and Echo Cancellation development. GL's Voice Quality Testing (VQT), accessed through an easy to use GUI interface, provides the voice quality measurement and analysis tools for all types of networks carrying voice traffic. Typical network applications include VoIP systems, PSTN, ATM networks, Frame Relay, and Wireless Networks.

The GL VQT utilizes three widely accepted algorithms to perform the voice comparisons, the Perceptual Evaluation of Speech Quality (PESQ LQ/LQO/WB) per Rec. P.862/P.862.1, the Perceptual Analysis / Measurement System (PAMS) per Rec. P.800, and the Perceptual Speech Quality Measurement (PSQM) per Rec. P.861. PESQ provides an objective measurement of subjective listening tests on telephony systems. PAMS predicts overall subjective listening quality (a human's perception of quality) without requiring actual subjective testing (a very expensive and time-consuming process). PSQM predicts subjective quality of speech codecs without requiring subjective testing. The GL VQT performs PESQ LQ/LQO/WB, PAMS, and PSQM (+) simultaneously, using two voice files (Reference File and Degraded File) and provides the algorithm results in both a graphical and tabular format.

Voice Quality Assessment Main Features

- Manual or Automatic operation using GL's VQuad™, PacketGen™/PacketScan™, MobNetMon™, DCOSS, or T1/E1 Analysis Cards.
- Testing the Voice Quality of all Telecom Networks.
- Measuring the affect of Packet Jitter in VoIP Network.
- Measuring Voice Performance Over Frame Relay Networks.
- Analyze the Effects of Codec Compression in Wireless Networks.
- Provides PESQ LQ/LQO/WB results along with Active Speech and Noise Levels, Latency, Jitter, Clipping, and power Measurements.
- Provides PAMS Listening Effort (LE) and Listening Quality (LQ) results.
- Provides PSQM (+) Mean Opinion Score (MOS) results.
- Tabular as well as Graphical Results.
- Automatic Mode allows the GL's VQT to execute on a network system and point to a user-defined network drive.
- Complete automatic logging of all results with the ability to import log back into VQT.
- Fully remote controllable

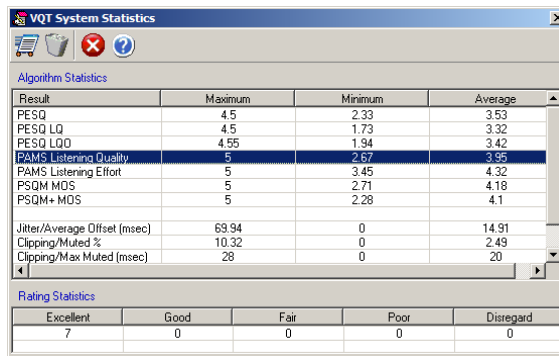
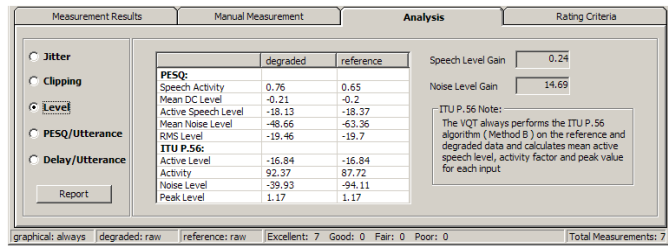
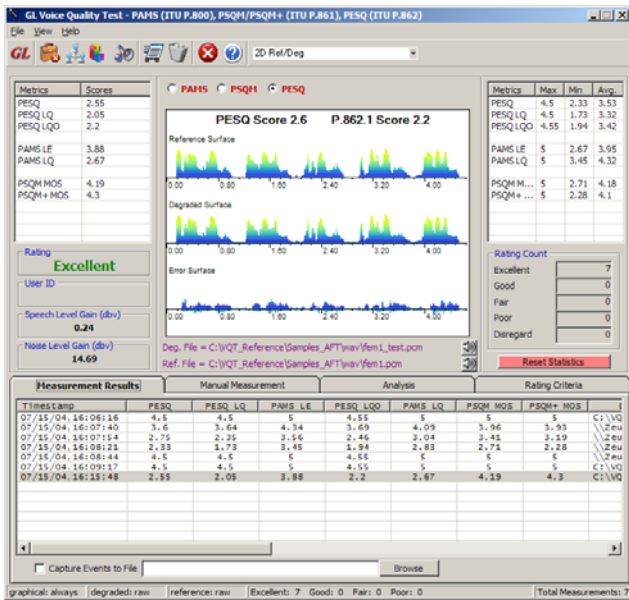
For more details, please visit our web page <http://www.gl.com/VQTanalysis.html>.



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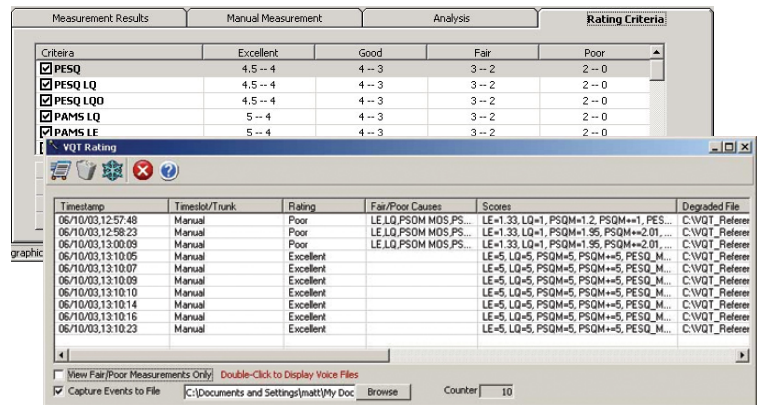
The GL VQT software provides a user-friendly interface to perform manual voice quality assessments by simply entering a Reference File and a Degraded File. The results of the VQT algorithms, PESQ LQ/LQO/WB, PAMS, are displayed both in tabular format as well as graphically. Additional analytical results are displayed as part of the assessment such as jitter, clipping, noise level, and delay (end to end as well as per speech utterance). All results may be saved to file for post processing viewing along with sophisticated searching on the results within the VQT application.



The user may configure a Rating Criteria for all VQT algorithms as well as the additional analytical results.

The rating criteria may be configured for Excellent, Good, Fair, and Poor and the results of the rating criteria may be saved to file for post processing viewing.

Thus, the user may view only Fair and Poor results if desired. Full statistics are also available that includes all measurement results as well as Rating Criteria results.



The GL VQT may also be executed in Auto Mode. This allows the GL VQT to reside on a Network computer and point to a single or multiple user-specified network drives/directories. Voice files are recorded to this network drive/directory and GL VQT automatically performs the voice quality algorithms and displays the results. Multiple GL VQT Auto-Measurement sessions may be configured, each session with a unique set of requirements and a unique reference voice file. In addition, the user may specify voice files to be saved based on the rating criteria (i.e. if VQT is fair or poor, save the degraded voice file).

