The GL’s Network Monitor Voice Quality testing solution provides a complete solution for the telecommunication operators to verify the quality of their service, therefore to provide a better service for the customer.

The solution consists of 4 parts:

- **Distributed VQuad™ Nodes** - These nodes control individual or multiple wireless, landline or VoIP telephony terminals.

- **Voice Quality Testing Software (VQT)** – provide PESQ LQ/LQO/WB (ITU-P.862.1/2) and POLQA (ITU-T P.863) results. Fully automated and remotely accessible. All results are automatically transferred to the Central Database for access via the WebViewer™. Included with the PESQ results are Jitter, Clipping, Signal and Noise Levels.

- **VQuad™ Command Center** - remotely controls multiple distributed VQuad™ nodes (Network nodes or Distributed Degraded Voice Collecting Sites), performs voice quality analysis, RTD/Echo Test/Data Test measurements, automation scripting, and scheduling daily tasks.

- **Remote Client WebViewer™** - remotely control any node within network, view status of entire network, and access all results associated with the VQuad™ test including Call Control (Call Failure and Call Dropped), Voice Quality, Round Trip Delay, One Way Delay, Echo Measurement, Data Testing, Video Testing, Fax Events from PC or Mobile Device.

For more details, please visit our web page [http://www.gl.com/netvoicequality.html](http://www.gl.com/netvoicequality.html)

**Main Features**

- Complete voice quality testing solution for Wireless, PSTN, and VoIP networks while voice communications traverse between these networks.

- Each VQuad™ node site is equipped with Wireless, FXO Analog, VoIP Ethernet, and T1/E1 interfaces. Remotely controls far-end Network Node.

- Remote Client WebViewer™ facilitates real-time call control information, voice quality scores and statistical information display using a simple web browser.

- VQuad™ includes voice quality test method POLQA (ITU-T P.863).

- VQT supports POLQA (ITU-T P.863) and other international standard voice quality test methods including PESQ (ITU-T P.862), PESQ LQ/LQO (P.862.1), PESQ WB (P.862.2).

- Full support for VQuad™ CLI and API (both Windows® and Linux).

- Supports multiple scripts execution during a single test over an established call.
**Distributed VQuad™ Node**
The VQuad™/VQT software combination, along with the GL’s Dual UTA HD hardware, provides Voice Quality, Data test, Video Conference, EC, and Fax Event results for Wireless, PSTN, and VoIP networks.

- Each VQuad™ Node remotely controls far-end Network Node.
- Provides automated call control through scripting.
- Simulates voice communications and collects degraded voice for each network node for voice quality testing.
- VQT Auto Mode allows automatic execution of the VQT algorithms (PESQ LQ/LQO/WB, POLQA NB/WB/SWB)
- Echo Measurement and Analysis (using EMU)
- Data and Video testing available for Mobile devices (i.e. iPhone/Android) along with Ethernet connection (wired, WiFi, 3G/4G Broadband card) associated with the PC.
- Fax Emulation supporting up to 4 independent and simultaneous sessions with speeds up to 33600 baud (V.34).
- GPS and ITS location tracking with results overlay.

**VQuad™ Command Center**
VQuad™ Command Center controls all network node locations, with each node location comprising of VQuad™ devices (Mobile Bluetooth®, Landline phones, VoIP Terminal, FXO, TDM). The Command Center controls all distributed sites, including actions such as:

- **Central Monitoring** - Controls and checks the status of all distributed network nodes in real-time and remotely controls each Network Node
- **Automation** - Provides automation with flexible and easy to use scripting
- **Scheduling** - customizes daily tasks or repeatable tasks for each VQuad™ Node) along with the entire region
- **E-mail Support** - is the ability to provide user-defined automated email associated with VQuad™ errors as well as VQT failed results. The email alerts are user-defined and supports multiple email addresses

**Remote Client WebViewer™**
GL’s WebViewer™ facilitates VQT (PESQ, POLQA), Call Control, Voice Quality, Data Test Results, Video Conference Test Results, Echo Measurement, Fax Events, VQuad™, and other associated results display via a simple web browser. WebViewer™ is a simple, easy-to-use Web browser which can operate on both PC and Mac systems (including iPhone and iPad).

- VQuad™ and associated applications can be configured to send the results automatically to the centralized database.
- WebViewer™ queries the central database and displays the results in both tabular and graphical formats.
- Multi-user support, and user-friendly interface is remotely accessible via browser based clients.
- WebViewer™ can search the database based on a variety of user-defined parameters and display all returned events per timestamp or per Call. WebViewer™ also facilitates google mapping of the Results, Nodes, and Devices.

**Buyer’s Guide**

- **VQT010** - VQuad™ Base Software
- **VQT280** - VQuad™ Probe HD (with Dual UTA HD)
- **VQT002** - Voice Quality Testing (PESQ only)
- **VQT006** - Voice Quality Testing (POLQA)
- **VQT030** - VQuad™ Command Center
- **EMU037** - Echo Measurement Utility (EMU) Software
- **VQT601** - Mobile Device Controller (MDC) Software
- **VQT022** - VQuad™ Fax Emulation (2 simultaneous ports)

For complete product list, visit the web page [http://www.gl.com/netvoicequality.html](http://www.gl.com/netvoicequality.html)