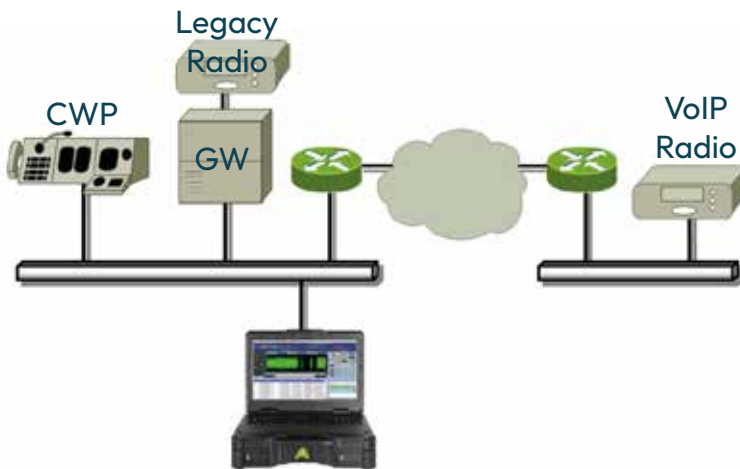


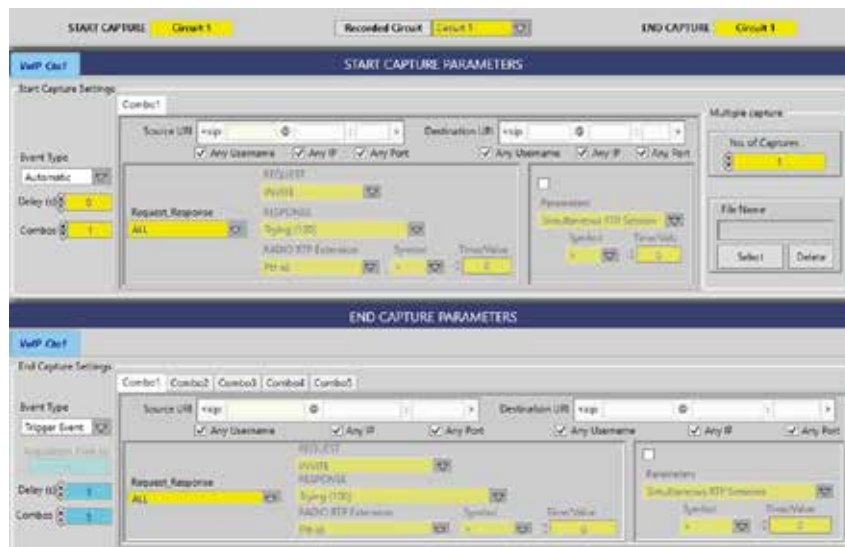
SIGNUM T50 is able to do Automatic VoIP tests within the emulation section and capture the configured alarms.



SIGNUM T50 works as VoIP ED-137 B and C monitoring tool, with the ability to apply simple and advanced filters(ED137) in order to analyze potential interoperability issues between VoIP equipment, decode and show all RTP streams.



SIGNUM T50 is able to initiate and terminate packet capture only when the searched event occurs, reducing the file size of packet and the time spent on fault-finding in analysis on ATC networks.



SIGNUM T50 Voice Quality Testing (VQT) is able to measurement the audio quality of analogic and VoIP aeronautical communication system with the same equipment, aiming test from CWP operators to analogic or VoIP Radio.



VQT Analogic

SIGNUM T50 inserts the audio test through CWP analogic connection, and receive the audio from (another CWP or a Radio or telephone Gateway).



VQT VoIP

SIGNUM T50 simulates a VCS element (CWP or Radio) to insert the audio test and catch the RTP audio at the network or it's received through another simulate VCS element (CWP or radio).



VQT Analogic and VoIP

SIGNUM T50 inserts the audio test through CWP analogic connection, and catches the RTP audio from the network emulating a VoIP Radio o CWP.



VQT VoIP Auto-loop

SIGNUM T50 simulates a VoIP CWP, make a call with another VoIP CWP and insert the audio test. The second VoIP CWP Utilises V5000i active an automatic audio digital loop aiming possible the Voice Quality Test.



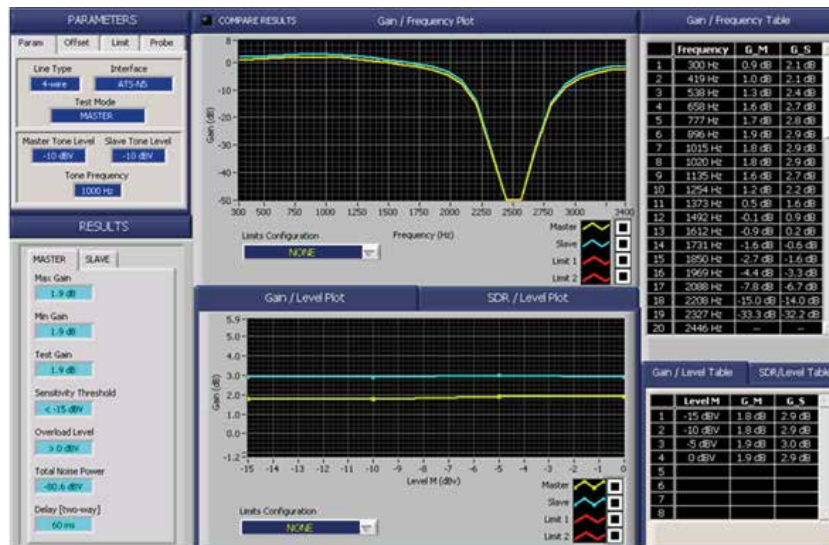
SIGNUM T50 works as full VoIP continuous meter, capable of generating and measuring audio in RTP format, mixed continuous meter, capable of generating RTP audio and measuring the analogue output or generating analogue audio and measuring the RTP stream, all in the same circuit. Also the system works as **analogic continuous meter** capable of generating and measuring audio in analogue mode.



SIGNUM T50 also works with analogic audio, in the frequency and time domain. The unit is able to operate with the following operations modes and communication protocols:

- TX/RX Audio Analysis - TX/RX Monitor Mode.
- Monitor/Emulator mode of different protocols (ATS-R2, ATS-N5, LCEN, FXS, FXO, LB).
- Automatic Lines - Systems measurement mode.
- Transmission Line Emulation.

Showing audio results as: Attenuation versus frequency, Gain versus level, Audio Propagation delay, Signal to distortion ratio SDR(dB and %), Psophometric noise power, Echo characterization, PTT and SQ propagation measurements.



SIGNUM T50 decodes ATS-R2, ATS-N5 and other protocols in a user-friendly information window ability fast troubleshooting.

