

On-Site Hydrophone Testing

Bird Dog 3

Versatile Quality Control System

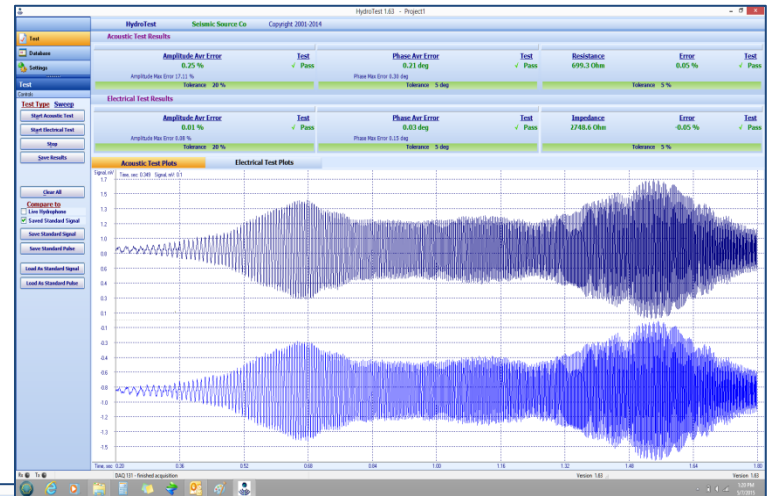
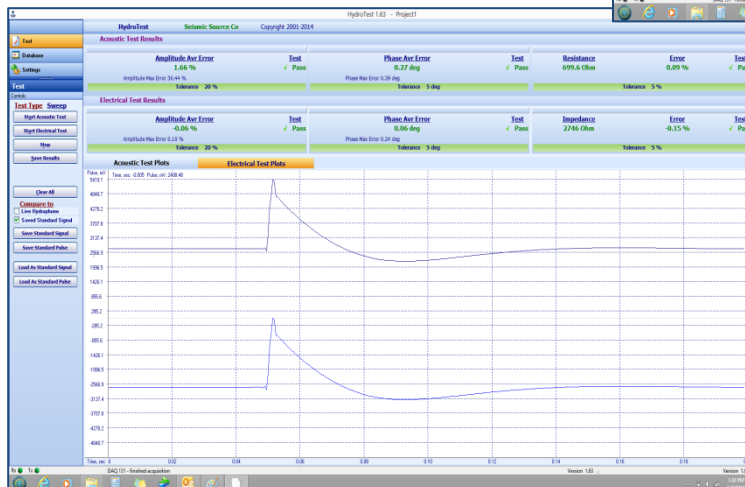
A General Purpose QC Tool:

- 32-bit, high speed, ADC chip for lower noise and increased accuracy
- Three different operation with a single unit
- 8 Gigabytes of Data Storage, Expandable to 16
- GPS based time and location saved for every record
- Stable and rugged unit for use in all conditions
- Three-Channels, unit checks three at once to save time and effort
- All test data saved in non-volatile memory for later download and retrieval
- Connects to PC via Ethernet or optional Wi-Fi, provides control, data download and real time display and analysis of data and results



Hydrophone Testing Features:

- QC equipment in the field (although in a dry setting)
- QC individual hydrophones or streamer sections
- Uses calibrated sound standard as reference (provided with system)
- Assures clients that hydrophones are functioning correctly



Hydrophone QC Software:

- Measures electrical and acoustic properties
- Verifies hydrophone accuracy and output
- Records and Prints all Test Results

Bird Dog 3 Specifications

Bird Dog 3 Tests and Limits

Test	Range	Accuracy	Resolution
Frequency	1-100 Hz	±0.2 Hz	±0.01 Hz
Phase	-	-	-
Resistance	10-10,000 Ohms	±1 %	±0.1 Ohm
Sensitivity	-100% to +100%	±2 %	±0.001%
Distortion	0-20%	±2 %	±0.01 %
Damping	0.1-0.9	±1 %	±0.001
Leakage	1-100 MOhm	±1 %	±0.1 MOhm
Noise	-	-	-

Hydrophone QC System Includes:

- Three Channel Bird Dog3 Unit
- Bird Dog 3 Hydrophone QC kit with:
 - Hydrophone Sound Tube – Provides Uniform Input to Hydrophone Elements
 - Hydrophone Amplifier – Matches Hydrophone Output to BD3-3
 - Hydrophone Cable Set – Matching cables and connectors for hydrophones and tester
 - Power Cable
 - CAT5 Computer Interface Cable



General Bird Dog 3 Specifications

Performance	
A/D	32 bit sigma delta converter
Dynamic Range	126 dB
% THD	0.0012 %
Crosstalk	Better than -125 dB
CMRR	> 100 dB
Noise Floor (@2ms)	< 0.09 µV RMS
Input Impedance	20k Ohms
Sample Rate	??
Test Types	Geophones, Hydrophones and Vibrator Accelerometers

Physical	
# Channels	3
Temperature	-40°C to +85°C
Humidity	0 to 100%
Size	14" x 5½" x 3" (356 x 140 x 76 mm)
Weight	3.4 lbs (1.55 kg)
Data Storage (Internal 8GB CF)	480 hours for 3 channels @ 2ms
VibQC Option	+/- 12 volt Input