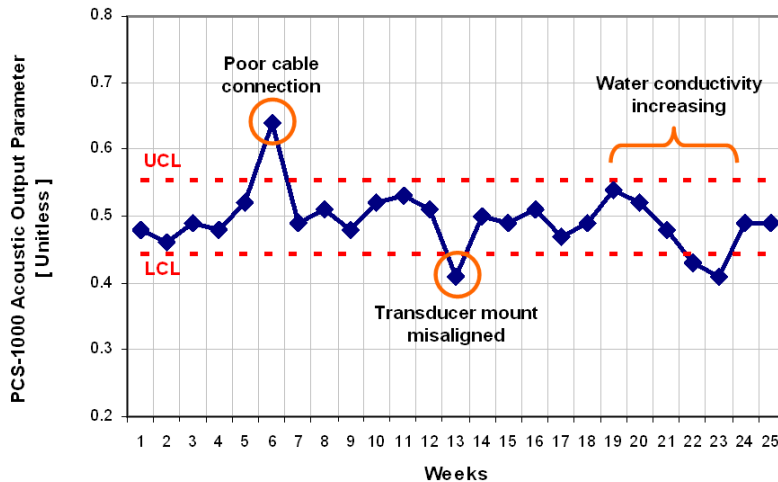


Pulsed Check Source (PCS-1000)

Designed to meet the need for a stable reference source in laboratories, the PCS-1000 serves as a trustworthy reference to regularly check the health of an acoustic measurement system. While representing your diagnostic imaging source, the PCS consists of a certified electronics controller and transducer that produces a known acoustic output. The PCS is calibrated in full compliance with regulatory standards AIUM-NEMA UD-2, UD-3, IEC 62127 and associated IEC standards.

A Trusted Reference Source

There are various factors that can affect the measurement stability of the metrology. The PCS-1000 is designed to serve as a stable "golden" source to put confidence in your measurements.



Tool monitoring with PCS-1000 detects unexpected outliers early for corrective action.

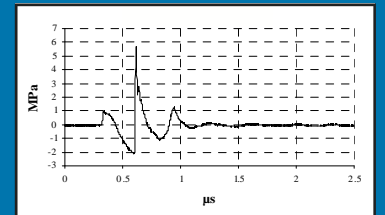
Features

- PCS-1000 calibration traceable to a National Standards Laboratory
- Complies with regulatory standards
- Portable plug-and-play unit with visible blue transducer
- Selectable output power: 16 mW and 80 mW
- Attenuator provides linear mode output
- Simple synchronization with measurement system

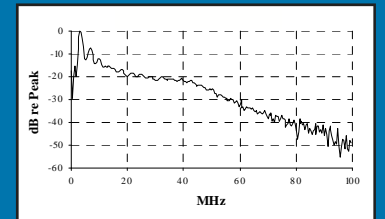


PCS-1000

Transducer Characteristics:



Pressure Waveform



Magnitude Spectrum

$I_{SPTA,0}$	110.271 mW/cm ²
$P_{r,0}$	2.107 MPa
$I_{PA,0}$	185.0 W/cm ²
f_c	3.357 MHz
- 6 dB Beam Width	3.4 mm
PRF	10 KHz
Power	80 mW
Focal Depth	9.5 cm

Representative Acoustic Parameters

Technical Specifications

Controller

- Output pressures: $P_{c,max}$: 4 - 6 MPa
 $P_{r,max}$: 1.5 - 2.5 MPa
- Pulse Repetition Frequency: 2 & 10 kHz
- Total Acoustic Power (nominal): 16 mW & 80 mW
- Output Power Stability: $\pm 3\%$ from certified value
- AC supply: 110/220 V, 60/50 Hz
- Pulses ON / OFF externally controlled by TTL input
- Synch Signal Output: TTL
- Linearity (attenuated mode)* : $\sigma_m < 0.5$
- Dimensions: 254 (W) x 146 (D) x 71 (H) mm

* As defined by IEC/AIUM

Specifications subject to change without notice.

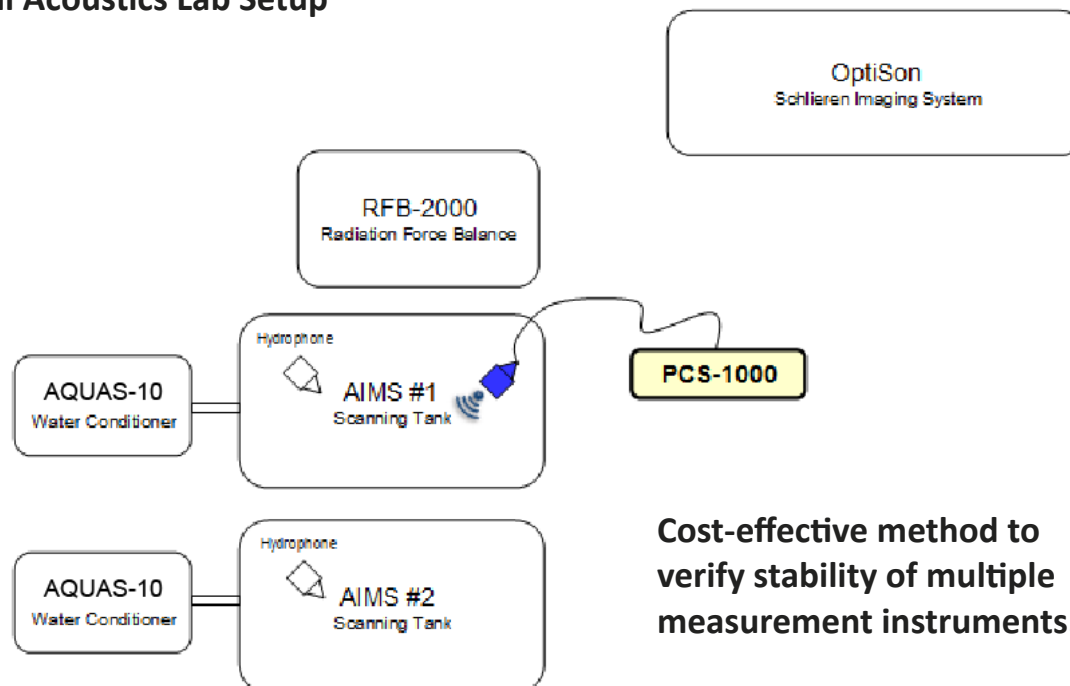
Transducer

- Pulse center frequency: 3.5MHz, broadband
- Dimensions: 32 mm diameter, 144 mm long
- Cable length: 2 m

Other Components

- Attenuator to improve accuracy of hydrophone measurements at the transducer focus by achieving a quasi-linear level
- Calibration certificate traceable to National Standards Laboratory
- Heavy duty carrying case

Typical Acoustics Lab Setup



Cost-effective method to verify stability of multiple measurement instruments.