

Teledyne Real Time Systems

Smart Phone D

Integrated 24-Bit Digital
Near-Field Hydrophone

The New Standard in Near-Field Measurements

The highly rugged encapsulated **Smart Phone D** was designed for real-time monitoring of near-field signatures. The integrated 24-bit digitizer at the sensor element provides the lowest noise interconnect between the phone element and digitizing electronics, eliminating the issues of long signal lines and cross coupling while providing unprecedented signature fidelity at sample rates of 2 kHz and 10 kHz. The unique straight-to-digital design allows more flexibility in umbilical design by providing digital communications clarity with even the longest of umbilicals. Built-in calibration ensures that the system will always report calibration levels. An on-board disciplined precision oscillator provides PPM-level sample rate accuracy. Built-in testing features and self-monitoring provide the user with instant assessments of the health of the phone.



PRODUCT FEATURES

- Integrated 24-bit digitizer
- Selectable sample rates of 2 kHz/10 kHz
- Form equivalent to 75xx series
- Built-in self-test monitoring
- >120 dB dynamic range
- 5 ppm sample rate accuracy
- Full scale range of 20 Bar
- Power/data over single twisted pair
- Available as standalone system
- Available integrated with Smart Source



Smart Phone D

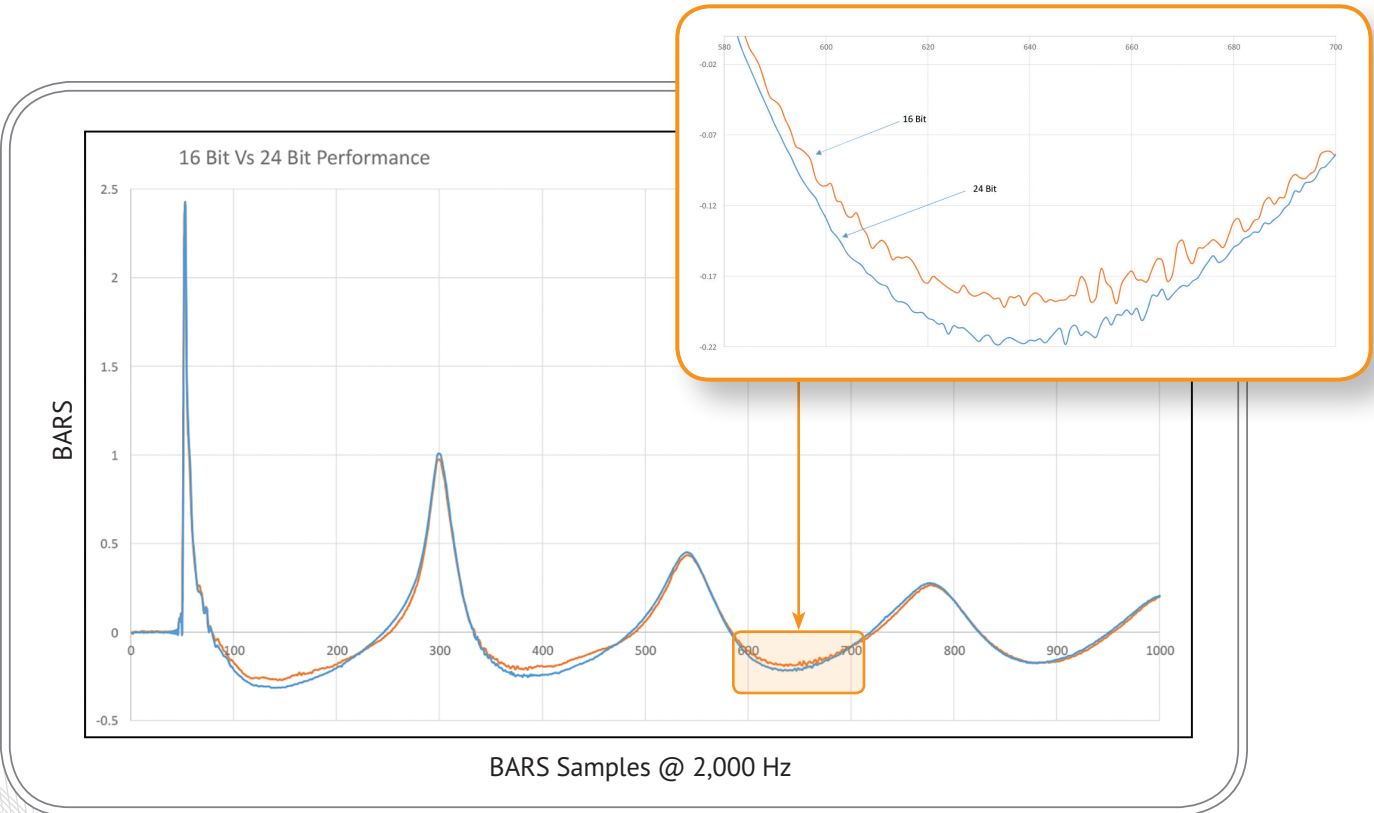


Integrated 24-Bit Digital Near-Field Hydrophone

TECHNICAL SPECIFICATIONS

Smart Phone D

Peak Pressure	25 Bar-m
Dynamic Range	>120 dB
Resolution	24 Bits
Digitizer Response	Flat from 1 Hz to 5 kHz
Operating Temp	-20°C to +75°C
Storage Temp	-40°C to +100°C
Nominal Operating Depth	1-20 m
Mounting	75xx series equivalent
Interconnect	2 pins
Power	Carried over data lines
Sample Rate	User Selectable 2 kHz/10 kHz
Cable Requirement	Single twisted pair 22 awg nominal
Calibration	Internally stored



Specifications subject to change without notice.
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