

Seatext® v3.3

Product Datasheet



THROUGH-WATER AND THROUGH-GROUND RADIO MODEM

Seatext® is the world's first commercial through water and through-ground radio communication system, designed to interface with sensors and control units.

Seatext® can be readily tailored to numerous applications including: through water and through ground data transmission, underwater networking, AUV homing, underwater to UAV communications, test tank instrumentation and diver communications.

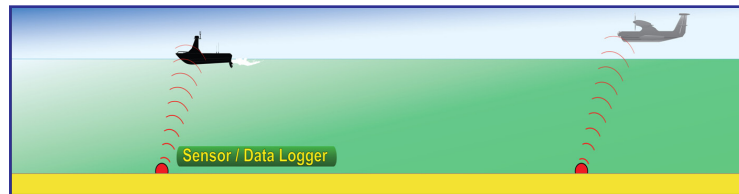


Delivering reliable communications under water is a challenge. WFS understands the challenges that operators face when designing and specifying systems for an operational scenario. The leading edge technology being developed by WFS Defense provides substantial operational and cost-effective solutions to the Defence & Homeland Security community.

KEY FEATURES & BENEFITS

CROSSES WATER / AIR INTERFACE

Underwater communications from a variety of platforms, e.g. submarines, AUVs, remote sensors and instruments. Enables seamless contact with assets on and above the surface.

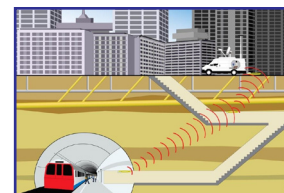
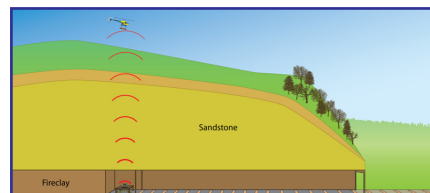


Seatext can also be used to set up underwater communication networks, of particular use in littoral or harbour waters. Line of sight is not required and the signal will pass through sea walls.

COMMUNICATES THROUGH GROUND

Seatext will pass through concrete, rock, mud, earth and into the air to provide secure communications.

Applications include emergency communications in underground and public transport networks, extending Network Extended Capability into underground sensors.



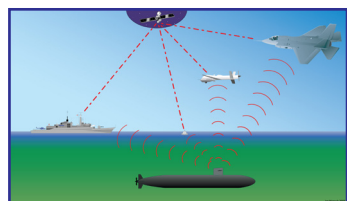
EFFECTIVE IN COMPLEX ENVIRONMENTS

Unlike acoustic systems, WFS's radio technology is unaffected by acoustic noise, turbidity, mud or ice and will operate in shallow water as well as congested environments such as harbours, estuaries and waterways. In addition the Seatext operates without interfering with acoustic sensors or sonar and can be used without the ill-effects to aquatic life often attributed to acoustic technology.

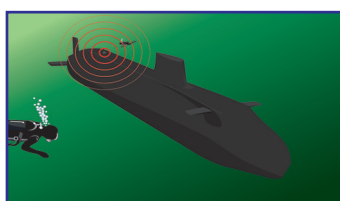


Through-Water & Through Ground Radio Modem: Seatext® v3.3

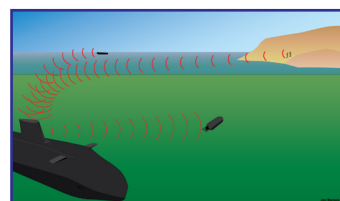
THROUGH-WATER AND THROUGH-GROUND RADIO MODEM



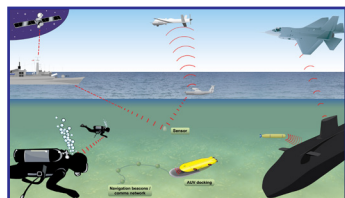
Submarine NEC



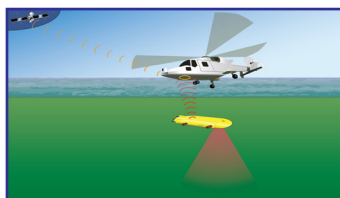
Sub Diver Communications



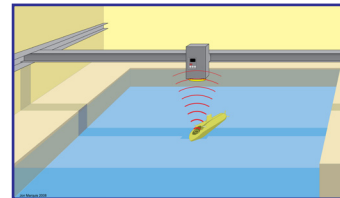
Covert Operations



Multiple Communications



AUV Communications



Wireless AUV Test Tank

ADDITIONAL FEATURES

- Transceiver
- Immunity to thermal layers
- Fast propagation
- Can be connected in a network
- GSM option

BENEFITS

- Two way communications
- Can be interfaced to text entry terminal for comms link
- High tolerance of water conditions
- Reduction in Doppler shift
- Extended coverage
- Global access

TECHNICAL SPECIFICATIONS

Performance

- Data rate = 100 bits/sec half duplex
- Multiplexing – multiple units uniquely addressable
- Modems can be connected in a network

Antenna

- Loop
- Options available for extended range

Data

- RS 232 data interface

Physical (typical)

- Housing—application specific
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Power Requirements

- 18-28V external power or battery pack to specific application
- 4W receiving / 16W transmitting / 5mW Sleep

Environmental

- 50m housing
- 3000m available on request
- Temp. operating -10 to + 35°C

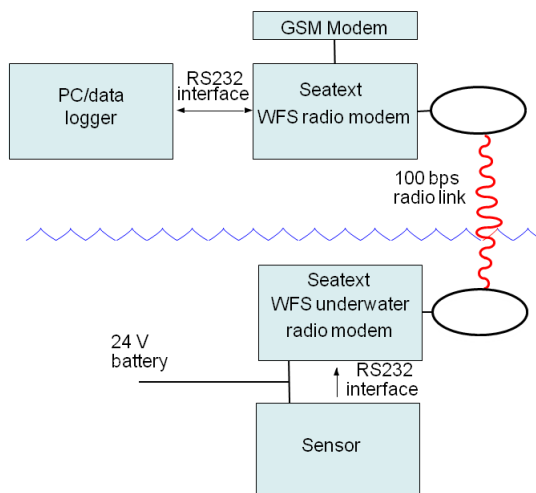


Diagram of Seatext® modem, set up to transmit from water to shore. The modem can be easily integrated with third party systems, in this example connecting to a laptop, GSM modem and Sensor.

FOR FURTHER INFORMATION PLEASE CONTACT US



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DEFENSE

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