

Seatooth®

Product Datasheet



WFS

DEFENSE

THROUGH-WATER BROADBAND DATA LINK

Seatooth® uses the latest electromagnetic digital technology to enable high data rate transmission over a short range, through water and ground.

Seatooth® provides 2-way penetrating, wireless RF communications through seawater at higher data rates of 100 kbps (compressed video transmission).

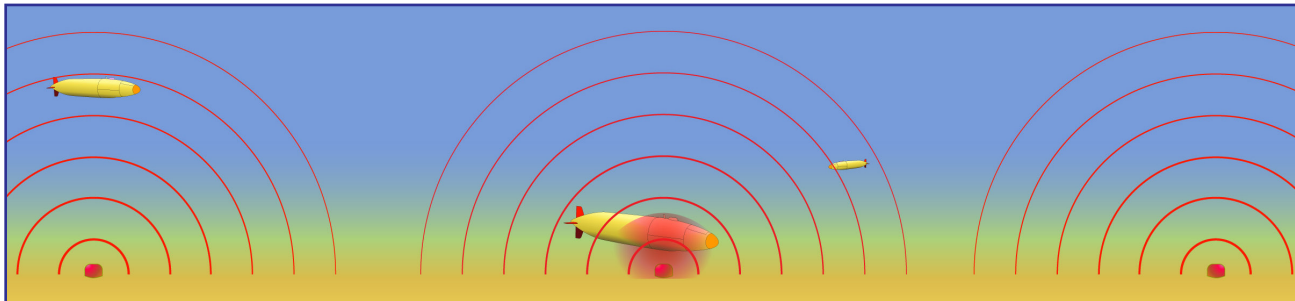
Applications include high speed data transfer between underwater sensors and unmanned underwater vehicles (ROVs, AUVs and HAUVs).



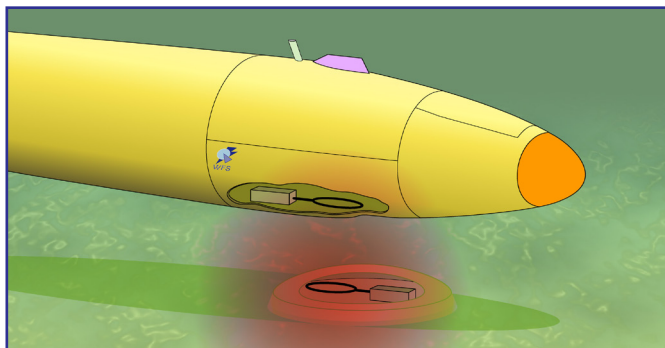
TARGET APPLICATIONS

- UUV to remote sensors
- UUV to UUV
- UUV to host platform
- Homing and docking
- Data collection
- Through bulkhead
- Test tank Communication
- Seatooth® will support compressed video transmission

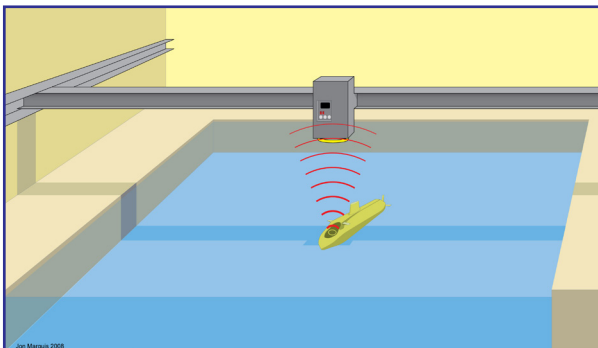
UNDERWATER SENSORS TO AUV



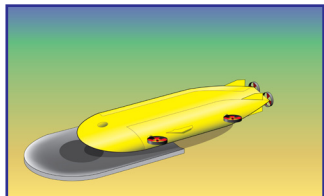
HIGH SPEED DATA TRANSFER



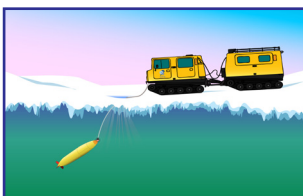
TEST TANK INSTRUMENTATION



DATA & POWER TRANS



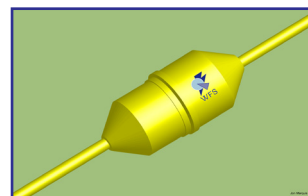
AUV DOCKING



HIGH SPEED DATA



WIRELESS CONNECTOR



Through-water broadband data link : Seatooth®

THROUGH-WATER BROADBAND DATA LINK

FEATURES

- Crosses water/air interface
- High data transfer rate
- Connector replacement
- Transceiver
- Shorter download times
- Immunity to acoustic noise
- Immunity to particulates
- Immunity to multi-pathing
- No effect on acoustic transmission

BENEFITS

- Removes need for cable to shore
- Removes need for repeater buoy
- Unobtrusive, covert, no navigation hazard
- Reduced operating time
- Reduced operating costs
- Fast access to data
- No connector mate at depth or complex vehicle docking
- Two way communications
- Reduced power consumption
- Can operate in littoral or near offshore facilities and vessels generating acoustic noise
- Can operate in turbid water
- Can operate in shallow water/congested environments such as harbours and estuaries
- No interference with or harm to aquatic life
- No interference with acoustic sensors or sonars

TECHNICAL SPECIFICATIONS

System Performance

- Range Up to 10m.
- Bit rate Up to 100 kbits/sec

Antenna

- Type Loop
- Dimensions Variable to suit application

Data

- Interface Transparent Ethernet
- Compatible with TCP/IP
- & UDP packets

Power Requirements

Each unit

- Transmitting 24Vdc, 660mA
- Receiving 24Vdc, 190mA

Physical

- Housing Application specific

Environmental

- Temp. operating -10 to + 35°C
- Temp. storage -20 to + 50°C



FOR FURTHER INFORMATION PLEASE CONTACT



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