

Seatooth®

Product Datasheet



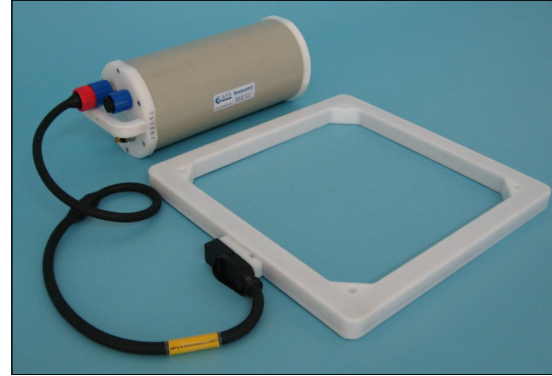
WFS

ENERGY & ENVIRONMENT

THROUGH-WATER BROADBAND DATA LINK

Seatooth® uses the latest radio frequency (RF) technology to enable high data rate transmission over a short range, through water and ground.

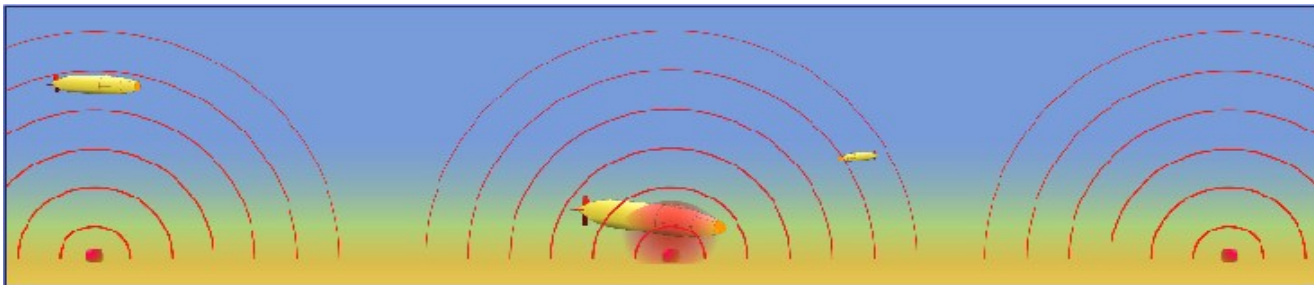
Applications include high speed data transfer between underwater sensors and unmanned underwater vehicles (ROVs and AUVs).



TARGET APPLICATIONS

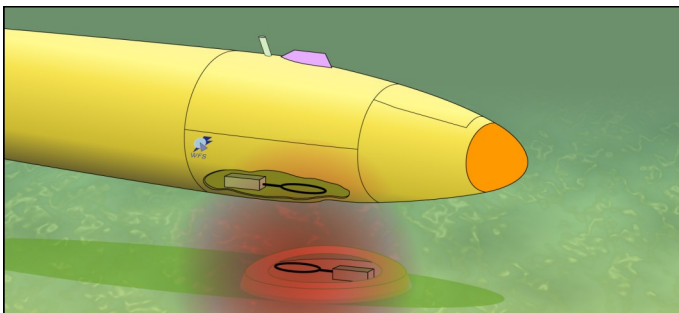
- UUV to remote sensors
- UUV/ROV/AUV comms
- UUV to host platform
- Wireless connectors
- Inspection of wind & tidal power farms
- AUV docking solutions
- Data collection
- Test tank comms

UNDERWATER SENSORS TO AUV

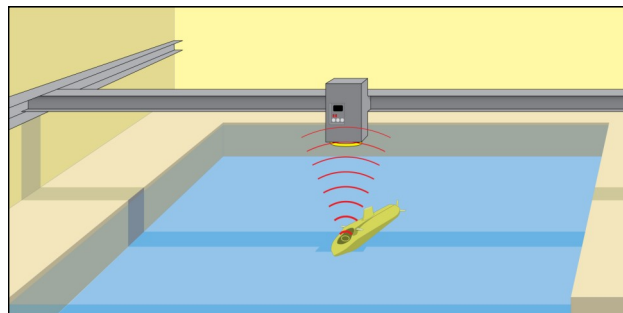


HIGH SPEED DATA TRANSFER

TEST TANK INSTRUMENTATION

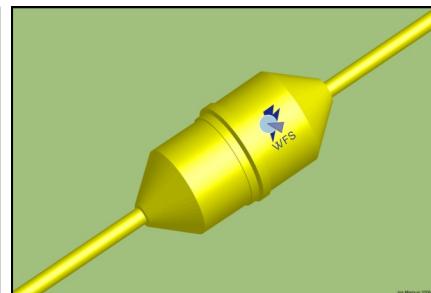
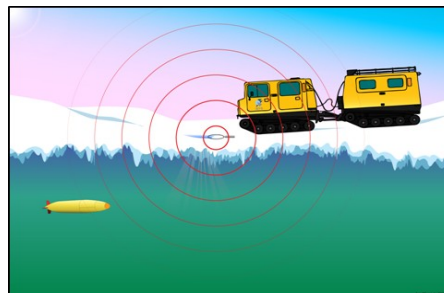
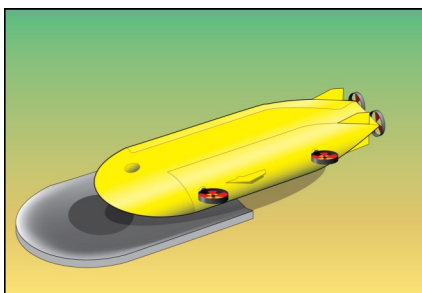


AUV DATA & POWER TRANSFER



THROUGH-ICE COMMS

WIRELESS CONNECTOR



Through-water & through-ground 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 100kbits/sec

Antenna

- Loop
- Can be customised to suit application

Data

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

Power Requirements

Each unit

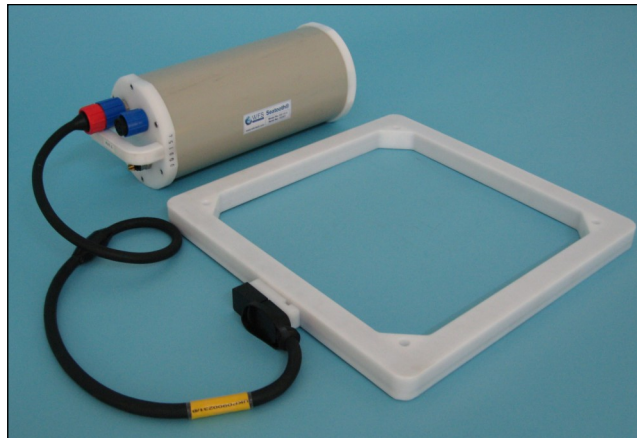
- Transmitting 24Vdc, 660mA
- Receiving 24Vdc, 190mA

Hardware

- Can be customised to suit application

Environmental

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



FOR FURTHER INFORMATION PLEASE CONTACT

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Through-water & through-ground broadband data link: Seatooth®