NOAA Technology Demonstration - USS Bass


Kraken Robotics
World Leaders in Underwater Sensors & Robotics

Jeffrey Bartkowski - jbartkowski@krakenrobotics.com
AquaPix® - Man Portable SAS Payload

- Modular Payload System designed to retro fit existing 7.5”– 9” vehicles
- Utilizes Kraken’s new Light Weight SAS arrays
- Gen III RT SAS Processor for reduced power draw
AquaPix® - Synthetic Aperture Sonar Updates

Ultra High Definition SAS

• Highest commercially available SAS resolution at 1.9 cm x 2.1 cm

• Constant, measurable resolution across swath width of up to 200 m per side

• Compatible with existing MINSAS systems

https://krakenrobotics.com/kraken-announces-ultra-high-definition-upgrade-for-aquapix-imaging-sonars/
AquaPix® - Synthetic Aperture Sonar Updates

Seamless SAS Processing

- Kraken traditionally processed SAS in 50 m along track tiles
- Seamless SAS allows for user defined along-track tile lengths to match the vehicles survey line e.g. 500m, 1000m, 2000m etc.
- Process and beamform on a Ping-by-Ping basis
- Reduces vehicle induced motion artifacts for higher quality mosaics

Dredge Scrapes – Rhode Island

235 m
KATFISH™ – High Speed SAS Towfish

Commercial & Military Certified Versions

- Very High Resolution and ACR
  3.0 x 3.3 cm / 1.9 cm x 2.1 cm
  @ up to 4 km² / hr
- Advanced Obstacle Avoidance and Terrain Following
- Designed for USVs and Remote Operations
- Real Time SAS Waterfall Display with embedded ATR
**Kraken SeaPower™ - Subsea Batteries**

- Pressure Tolerant Battery Systems
- Gel encapsulation, No oil comps required
- 6000 m rated
- Multiple voltage and capacity options
- Advanced Battery Management System
- Demonstrated 100+ hour missions at 5000 m

**SeaPower - 2.6 kWh Blocks**

**HUGIN Battery Replacement System**
80 kWh