

APHROS – Underwater E-field Sensing Capability

QUASAR Federal Systems (QFS) is pleased to introduce the latest addition to our electromagnetic sensing portfolio: Aphros – a three-axis underwater E-field sensing system. Designed with revolutionary new capacitive electrodes and a custom low-noise amplifier, Aphros offers low-noise performance in a robust, user-friendly configuration. Aphros electrodes can be stored dry and wet/dry cycled without performance degradation.

QFS Underwater Electrodes

- No electrochemical reaction in the water
- Dry storage
- No performance degradation with wet/dry cycling
- Longer functional lifetime than Ag/AgCl technology



Aphros

- 3-axis Underwater E-field Sensing System - 1 m baseline
- 1 nV/m-rtHz @ 1 Hz
- Depths to 300 meters
- Fits A-size sonobuoy dimensions
- Data stored on SD card
- Magnetic compass and acoustic modem

Aphros – State-of-the-art 3-axis E-field Sensing System

Feature	Advantage	Benefit
Low noise environment	Higher fidelity signals	Increased range of detection and identification
Low noise sensor	Takes advantage of low noise environment	Smaller target detection and identification
Passive technique	No source required	Enables covert detection
Independent information	Adds to info gained from acoustics	Lower false alarm rates