

EOS SRS – “Black Box” Secure-Recording Sensor

This preliminary data sheet describes the Cambria Black Box Discriminating Sensor. The purpose of the device is to provide discriminating leak detection and to securely record those events in a solid state recorder. The rugged transducer is designed to withstand severe shock, including explosions and fire, and still maintain data integrity. The sensor records all events, including any attempt at moving the sensor or data download. Detects water and fuel at five different levels, has excellent accuracy and high repeatability. The unit is made of Delrin and stainless steel and can be used in aggressive vapor environments.

The EOS SRS Black Box can be used in locations where high-confidence leak audits are required. Cambria can provide an independent auditing service

Features

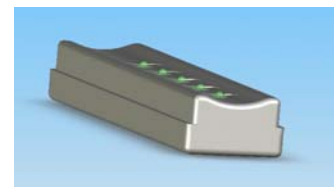
- Write only, invisible flag on read attempt
- Read by highest level user only (128 bit)
- High temp Mil components
- High ablation, shock absorbing case wrapped in high temp material, all encased in 0.5 inch epoxy 94V0 with external Delrin case.
- Records all environmental events plus movement, tamper, read attempt.

Applications

- Secondary Containment
- Turbine Sump
- Hydrocarbon Monitoring
- Fuel-Alcohol-Water Discrimination
- Technology Approved by Calif. Water Board
- 3rd party Approved

Benefits

- Conventional Fuel, E15 and E85
- 1% accuracy at level detection
- Straight-forward Field Calibration
- Patented Anti-Tamper feature
- Conventional Fuels, E15, E85
- Low Power
- Digital, Switched Analog



Specifications

Type:	Secure Recording Sensor, Discriminating, 5 levels, Fuel/Water/Alcohol
Technology:	Patented Evanescent IR Absorption
Operable sensor temp range:	-40°C to 60°C
Cable temperature:	-40°C to 85°C
Sensor output:	0.5 - 5 V
Sensor diagnostics output:	0 - 3.6 V
Guaranteed service life time:	1 Million Cycles, 1 year.
Repeatability:	1%
Hysteresis:	1%
Dimensions:	5" length, drops into 1.5 inch centralizing tube
Connector:	Customer driven: 8 pin connector or 2 m cable pigtail
Response Time:	10 ms intrinsic: System response depends on output type
Case:	Delrin. NEMA-4/IP65
Approvals:	California Water Board, 3 rd party test, UL C1 Div 1 submitted