



EOS 80 Series Sensors

The Cambria EOS 80 is a unique high performance optical sensor that will detect the presence of hydrocarbons and other liquids, using a patented evanescent wave technology. The sensor discrimination function refers to the ability to detect and identify water, alcohol, gasoline, diesel, engine oils, etc. With no moving parts, this rugged sensor line features a slim profile that allows the unit to be easily installed in a wide variety of tight environments. The highly flexible form factor has allowed designs for very small shapes (0.25 diameter), extreme temperatures or pressures, and the sensor head can be made completely non-metallic. The sensing head and electronics are UL Class 1 Div 1 approved. The sensing head can be located remotely from the electronics via non-conducting fiber optic cable or via electrical cable.

The EOS 80 series is designed to be attached to a safety agency-approved alarm system which has standard zener barrier protection for components going into the hazardous rated zone. For situations where there is no zener barrier available, the EOS 485EX can be used. The EOS485EX has its own zener protection, and outputs a continuous data stream and alarm relay contacts.

Applications

- Secondary containment
- Interwall environments
- Hydrocarbon Monitoring
- Fuel-Water Discrimination
- UL Class 1 Div 1 Approved

Benefits

- Single channel discriminating sensor
- Field tested, 3rd Party Approved
- Low cost, high accuracy
- Easy to use/install
- Narrow profile
- Fast reaction time (0.05 sec)
- Variety of form factors













Preliminary Specifications

Premimary Specifications	
Type:	Discriminating, single point, Fuel and Water detection
Technology:	Patented Evanescent IR Absorption
Operable sensor temp range:	(-40)°C to 60°C standard. High temp to 225°C
Cable Temperature:	(-40)°C to 85°C (high temp system to 225°C)
Power:	9-30vdc. Current draw 14ma. Total power: 0.1 watt
Sensor output:	RS232
Sensor diagnostics output:	0-3.6V
Guaranteed service lifetime:	1 Million cycles, 3 year warranty
Repeatability:	1%
Hysteresis:	< 0.1%
Dimensions (sensor head):	50mm long, 16mm diameter standard
Dimensions (sensor case):	110mm long, 51mm diameter typical
Connector:	2 m cable pigtail, connectorized optional
Response Time:	10 ms intrinsic: PNP or NPN output or custom
Weight:	110gr (depending on final configuration)
Case:	Delrin. NEMA-4/IP65
Approvals:	California Water Board, 3rd party test, UL Class1 Div 1