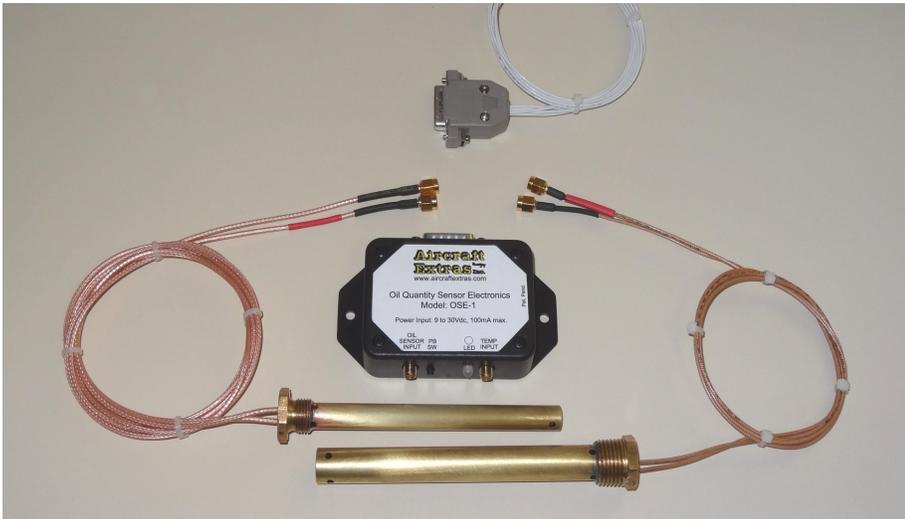


Real Time OIL QUANTITY SENSOR in flight or on the ground



Output to:

Your EFIS, our AG6 or other

Analog Outputs:

Oil Quantity
Oil Temperature

Digital Output Alarms:

Caution Oil Level
Warning Oil Level
Oil Over Temperature
Sensor Malfunction

Fully programmable

PATENT PENDING

Lycoming and Continental type sensors shown above.

DESCRIPTION

This oil quantity sensor with its associated electronics package will give the pilot a real time oil quantity while in flight or on the ground. This system is not meant to replace any other traditional methods of checking oil quantity. It is a new device that the pilot of a small aircraft can use in flight that he or she never had before. It will also measure oil temperature if that option was selected at purchase. The electronics enclosure features two analog outputs, one for oil quantity and the other for oil temperature. It also features a four digital output alarms (open collector type) for sensor malfunction, oil level warning, oil level caution, and over oil temperature. You may program the alarm trigger values for those outputs and choose a scale for both analog outputs.

Presently, we have two types of oil sensors available, one for standard Lycoming engine oil pan fittings and the other for standard Continental engine oil pan fittings. The sensor will fit quite a number of engines, oil pans, oil sumps and oil containers. Presently, the length of sensors are custom built. The sensor's length must be determined by the customer at the time of purchase. Later, we plan to build them up ahead of time as we create a database of standard lengths ordered. A list of our available sensor fittings will be available in the purchase area on our Website. Sensors with other fitting types may already be in our design schedule.

SPECIFICATIONS

Model: OSE-1 (Electronics package)

Power in:	+9Vdc to +30Vdc, (NEGATIVE ground system only)
Current Draw	Current draw, 80mA Typical, (200mA Max.)
Connector Types	D-Sub 15 pin, Connector Wiring, #20AWG aircraft wire suggested SMA male connector for sensor cables

SPECIFICATIONS continued

Analog Outputs	Oil Quantity (scaling is selectable) (Empty to Full) = (0.0 to 5.0V) (Empty to Full) = (0.25V to 4.75V) (Empty to Full) = (0.5V to 4.5V) Oil Temperature (scaling is selectable) (0.0 to 5.0V) = (0 to 300°F) (0.0 to 5.0V) = (-33 to 300°F) (0.0 to 5.0V) = (-50 to 300°F)
Alarms Outputs:	Open Collector Output, (100mA, 30VDC Max.) for Low Oil Quantity Caution Alarm Low Oil Quantity Warning Alarm Over Oil Temperature Alarm Oil Sensor Malfunction (or Out of Range) Alarm
Programmable Alarm Levels:	Oil Quantity Linearity increments (2 to 20 oil levels) Oil Quantity Caution Level Oil Quantity Warning Level High Temperature Warning Level
Weight	
Electronics Enclosure	3.4 oz. (97.0 grams)
Enclosure Material	ABS - Fire Retardant (not hermetically sealed)
Enclosure Dimensions	4.375" x 2.47" x 1.25" (111.12 x 62.72 x 31.8 mm)
Mounting Centers	2 Holes, 0.188" (4.775mm) Dia, Distance apart 3.875" (98.425mm)
Sensor Models: Sxx.x-5/8-18-xx.x and Sxx.x-1/2NPT-18.0	
Sensor Thread Types	1/2NPT for typical Lycoming engines & others 5/8-18 for typical Continental engines & others (other fitting types will be added and available as needed)
Sensor length	Length will vary depending upon application (measured from the bottom of the fitting hole to the top of oil quantity sensor) See our Outline and Mounting drawings for each sensor type for specifics
Temperature Ratings:	
Sensor	-30 to 302°F, (-34 to 150°C)
Sensor Cables	-40 to 392°F, (-40 to 200°C)
Electronics	-30 to 160°F, (-34 to 71°C)
Weight	
Sensor	for Lycoming type, 1/2NPT, 5.5" long with 4ft. cables, 3.1oz. (88.0 grams) (actual weight depends upon sensor type and configuration)