

OSS FlexSense© Optoelectronic Interface Box

MANUFACTURER AND VENDOR INFORMATION	
Effective Date: <u>December 1, 2002</u>	
Manufacturer Name: <u>Optical Sensors and Switches</u>	Sales Representative Name (s): <u>Jonathan Lang</u>
Address: <u>2530 Kirby Avenue, Suite 303</u> <u>Palm Bay, Florida 32905-3428</u>	Address: <u>Same as business address.</u>
Phone: <u>312-726-5933</u>	Phone: _____
Fax Number: <u>312-726-3993</u>	Fax Number: _____
E-mail Address: <u>sales@oss321.com</u>	E-mail Address: <u>sales@oss321.com</u>
URL Address: <u>www.oss321.com</u>	URL Address: _____

PRODUCT NAME/MODEL NUMBER: Optical Sensors & Switches, Inc. FlexSense© Optoelectronic Interface Box, part # PMOE-2, 4, 6, 8 for 2,4,6, or 8 sensor input permanent installations(12 VDC or 110 VAC) and part # POE-2, 4, 6 for 2, 4, or 6 sensor portable(temporary) applications with internal 6 VDC battery.

FIRMWARE VERSION/CHIP NO.: N/A

SOFTWARE VERSION NO.: N/A

GENERAL DESCRIPTION OF EQUIPMENT: Optoelectronic interface unit contains electronics and optics which supply light to OSS sensors and analyzes the returned light, creating outputs suitable for use with standard classifiers and WIM systems. The unit can provide a "piezo type" voltage pulse, or switch closure signal when a wheel load is applied to sensor. An analog output proportional to the load is also available for use with WIM systems. This interface allows the use of FlexSense© and Qwik-Sense© fiber-optic sensors with any traffic classifier which has a piezo or switched input. Unit draws 10- 30 milliamps(depending on number of sensor channels). System can be ordered in two configurations:

- **Permanent Interface** (part # PMOE-X): Cast aluminum enclosure, 19.05 cm (7.5") X 12.7 cm. (5") X 5.7 cm (2.25"). An external power cable and output signal cable is supplied. Input voltages of 12 VDC or 110VAC must be specified when ordered.
- **Portable Interface** (part # POE-X): Heavy-duty weatherproof powder coated NEMA enclosure, 25.4 cm (10") X 20.3 cm (8") X 11.4 cm (4.5"). Unite is equipped with an internal rechargeable 6 Vdc battery and output cable.

SENSOR TECHNOLOGY AND CONFIGURATION: FlexSense© Optoelectronic Interface unit measures light is output from the OSS fiberoptic sensors. When a wheel load is applied to the sensor, a small amount of light escapes from sensor fiber, causing the light level at the sensor output to decrease. The amount of the light is compared to a factory set reference for producing an output signal. The resultant signal can be used with a standard classifier to determine vehicle speed and classification.

SENSOR INSTALLATION: NA

INSTALLATION TIME: 10 to 15 minutes to hook up to power and to classifier.

INSTALLATION REQUIREMENTS: N/A

MAXIMUM NUMBER OF LANES MONITORED SIMULTANEOUSLY: No limit or maximum distance.

PRODUCT CAPABILITIES/FUNCTIONS: Traffic counts, vehicle classifications, 13 FHWA classes, and speed of vehicle.

RECOMMENDED APPLICATIONS: Permanent or portable traffic data collection, axle counts, classification, and speed.

POWER REQUIREMENTS (watts/amps): 10-30 ma at 12 volts DC.

POWER OPTIONS: Can be ordered with 12 VDC or 110 VAC input

CLASSIFICATION ALGORITHMS: N/A

TELEMETRY: N/A

COMPUTER REQUIREMENTS: N/A

DATA OUTPUT: Voltage pulse, switch closure or analog signal

DATA OUTPUT FORMATS: NA

SUPPORTING DATA BASE MANAGEMENT SYSTEM: N/A

EQUIPMENT AND INSTALLATION COSTS (One-lane and four-lane): Contact manufacturer for latest prices

STATES CURRENTLY USING THIS EQUIPMENT:

Country/State	Contact Name	Telephone Number
USA/Michigan DOT	Bob Brenner	517-322-1716
USA/Iowa DOT	Don Miller	515-239-1046
USA/Arizona DOT	Mark Katchpalle	602-712-8596
USA/Idaho DOT	Brian Hagan	208-334-8250
USA/Tennessee DOT	Ray Barton	615-350-4575
USA/Maryland DOT	Barry Balzanna	410-545-5509
USA/Alabama DOT	Charles Turney	334-242-6393
USA/Wyoming DOT	Bill Gribble	307-777-4433