

QWIKSense© Permanent Weight in Motion (WIM) Sensor

MANUFACTURER AND VENDOR INFORMATION			
Effective Date:		December 1, 2002	
Manufacturer Name:		Sales Representative Name (s):	
Optical Sensors and Switches		Jonathan Lang	
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PRODUCT NAME/MODEL NUMBER: Optical Sensors and Switches, Inc. QWIKSense© Permanent Weight in Motion (WIM) Sensor, with integral mounting bracket (Part # QWIM-6.5 and QWIM -11.5)

FIRMWARE VERSION/CHIP NO.: N/A

SOFTWARE VERSION NO.: N/A

GENERAL DESCRIPTION OF EQUIPMENT: Fiber-optic type WIM sensor 19 mm (.75") X 19 mm (.75") X 6.5 foot or 11.5 foot length. Integral 15 foot cable.

SENSOR TECHNOLOGY AND CONFIGURATION: Fiberoptic sensor technology. When a wheel load is on the sensor, a small amount of light escapes from the sensor fiber, causing the light level at the sensor output to decrease. The amount of the light is compared to a factory set reference by the optical interface for producing an output signal. The resultant signal can be used with a standard classifier to determine vehicle speed and classification. Since the light decrease is proportional to load, the sensor output can be processed by a WIM unit to produce estimated weight.

SENSOR INSTALLATION QWIKSense© Permanent Weight in Motion (WIM) Sensor are made for easy and uncomplicated installation. After lane is closed:

- Using a concrete saw cut a .19 mm (3/4") wide by 19 mm (3/4") deep by 6.5 foot or 11.5 foot long groove in road surface.
- Groove is cleaned out with compressed air.
- Next, apply two each 2" wide duct-tape on road top on both sides of cut. This will ensure easy clean up of Installation Sealant (Part # SEAL-6).
- Mix two part OSS Installation Sealant Kit (Part # SEAL-6) and pour into pre-cut grove.
- Place sensor into grove. Excess sealant will flow from under installation bracket. Place a weight on sensor to ensure mounting wings are flat and contoured with road top.
- After sealant is set, tear off bracket wings and sand sensor flush with road surface with belt sander.

- Place leads into 0.25 inch saw cut, and route to cabinet. Fill groves with sealant.

INSTALLATION TIME (Per Lane): One to two hours per lane after lane closure.

INSTALLATION REQUIREMENTS:

MAXIMUM NUMBER OF LANES MONITORED SIMULTANEOUSLY:

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

RECOMMENDED APPLICATIONS: Long term traffic data collection based axle weight, axle spacing, volume and speed.

POWER REQUIREMENTS (watts/amps): N/A

POWER OPTIONS: N/A

CLASSIFICATION ALGORITHMS: N/A

TELEMETRY: N/A

COMPUTER REQUIREMENTS: N/A

DATA OUTPUT: N/A

DATA OUTPUT FORMATS: N/A

SUPPORTING DATA BASE MANAGEMENT SYSTEM:

EQUIPMENT AND INSTALLATION COSTS: N/A

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