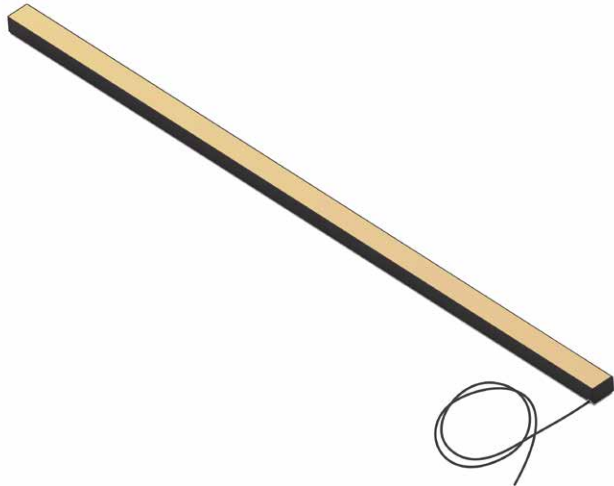




QL WEIGH-IN-MOTION SENSOR FOR ACCURATE AND STABLE TRAFFIC MONITORING

The [Quartz QL Weigh-in-Motion \(WIM\) sensor](#) from TE Connectivity (TE) is our latest innovation in traffic sensing developed with long-standing experience from our [BL RoadTrax traffic sensor](#). Designed for installation in most road types, the QL WIM can provide accurate weighing data for gross vehicle weights and individual axle loads over a wide range of speed, weights and temperatures. The robust mechanical structure of the QL WIM minimizes the disruption of the road for installation while still providing long-term performance. The use of Piezoelectric Quartz sensing elements allows for essentially no variation in sensitivity with temperature and enables measurements over a wide range of speed. With a highly efficient manufacturing process TE is able to offer the QL sensor as a cost-effective solution for weighing applications. The QL is compatible with many commercially available WIM systems already on the market today.

- WEIGH-IN-MOTION VEHICLE WEIGHING
- TRAFFIC-FLOW MONITORING
- OVERWEIGHT PRE-SELECTION
- OVERWEIGHT ENFORCEMENT



DESIGN QUESTIONS?

- Do you have an electronic interface?
- What is the end user application?
- Do you have experience Installing similar traffic sensors?

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QUARTZ QL WEIGH-IN-MOTION SENSOR

The QL WIM sensor is installed into the road in a relatively small slot. Backfilled with resin, the QL is then ready to provide WIM data over a range of speeds, vehicle types, and weather conditions. It can provide a constant flow of information on the traffic on highways and secondary roads. This data is then integrated into existing traffic monitoring systems, for Intelligent transportation system applications, planning and maintenance, road design and traffic safety. The QL is designed for COST 323 B(10) and ASTM 1318-09 Type III applications with a two sensor installation, higher accuracy may be achieved using multiple sensors.

- ROBUST MECHANICAL STRUCTURE
- MEASUREMENT UNIFORMITY
- QUARTZ SENSING TECHNOLOGY
- LOW TEMPERATURE COEFFICIENT

SIGNAL

- Negative signal for compression with tire force. Consistent with most Piezo WIM systems.
- High sensitivity charge output gives a good dynamic range.
- Able to weigh and classify vehicles from motorcycles and small cars to the heaviest trucks.
- High immunity to off-axis forces for improved accuracy.

QUALITY

- 100% tested for sensitivity along the length, insulation resistance, and capacitance.
- Results are computerized and saved.
- Sensors are serialized for traceability.
- Manufactured in an ISO 9001:2015 facility.

RELIABILITY

- Mechanical design of the sensor utilized FEA of all materials used to ensure design and fatigue limits.
- Testing has been completed for full design life with no loss of output.
- Qualified and tested to IP68 rating.

VERSATILITY

- Can be installed in a variety of pavements, including portland cement (Concrete) and asphalt.
- Available in different lengths to address different lane widths, as well as with different cable lengths.
- Typically only half-lane width. Depending on the application and the accuracy needed, multiple sensors are installed. Normal installations will range from 2 sensors in an array up to 8 or even 16 sensors for high accuracy systems.

DURABILITY

- Designed for years of maintenance-free service.
- Typically, no maintenance is needed other than normal annual calibration of the overall WIM system.
- Designed to operate over temperature range from -40 to +65°C.
- Able to withstand a high overload without damage.

CUSTOMER SUPPORT

- Available in 1.5 and 1.75 m lengths with 40 and 100 m of cable.
- Installation brackets and instructions with all sensors.
- Available to ship globally.