



**We make  
highways  
talk™**

- **MANAGEMENT**
- **SAFETY**
- **PRESERVATION**

*International Road Dynamics Inc. develops and maintains traffic management products and systems technology that make highways talk. What are they saying? They are providing information that roadway administrators need to manage traffic, preserve infrastructure and provide safety warnings to drivers.*

*IRD's multi-discipline, innovative and customer-focused team is expert in advanced technologies, advanced traffic solutions and custom-designed systems.*



**CUSTOMER  
DRIVEN™**

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## **IRD-PAT Bending Plate™ Weigh-In-Motion (WIM) System**

IRD-PAT *Bending Plate™* is a load cell scale system that fits the requirements for WIM applications including traffic monitoring, overload detection, toll applications and data collection for road maintenance and planning. The IRD-PAT *Bending Plate™* is robust with excellent long term stability with a life span of more than 10 years and can weigh vehicles traveling over the scales at speeds between 5 km/h to 200 km/h.

### **FEATURES**

- Excellent long term stability
- Speed range: 5 to 200 km/h (3 to 124 mph)
- Robust
- Long life

### **APPLICATION EXAMPLES**

- Traffic monitoring
- Road maintenance planning
- Overload detection
- Toll applications
- Statistics



**Truck passing through a Virtual Weigh Station using IRD-PAT *Bending Plate™* WIM Scales**

### **DESCRIPTION**

The foundation is made of high-strength steel plates. On the bottom side two slots are milled for the incorporation of wire strain gauges. The wire strain gauges are bridged to a Wheatstone-Bridge with supplementary fixed resistors for temperature compensation. The supply voltage and the output signal are carried in a shielded 4 conductor cable inserted through a hole with waterproof fitting. The weighpad is covered with a vulcanized neoprene rubber film.

The weighpad is bevelled on both sides at the longitudinal borders and supported by two bevelled strips in a foundation frame. The foundation frames are installed firmly in the road surface by a custom procedure outlined in IRD's installation manual.

A weighpad can be replaced on site in less than one hour once traffic control is in place.