



**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.

PAT Bending Plate™

The stationary weighpads are available in five sizes for different width and carrying capacity of lanes: **WP1250, WP 1550, WP 1750, WP 1950, and WP 1750 15T.**

Model: WP 1250

Weight	81 kg (178 lb)
Sensor Dimensions	507 x 1250 mm (20 x 49 in)
Nominal Load	10,000 kg (22,000 lb)
Carrying Capacity	15,000 kg (33,100 lb)

Model: WP 1550

Weight	100 kg (220 lb)
Sensor Dimensions	507 x 1550 mm (20 x 61 in)
Nominal Load	10,000 kg (22,000 lb)
Carrying Capacity	15,000 kg (33,100 lb)

Model: WP 1750

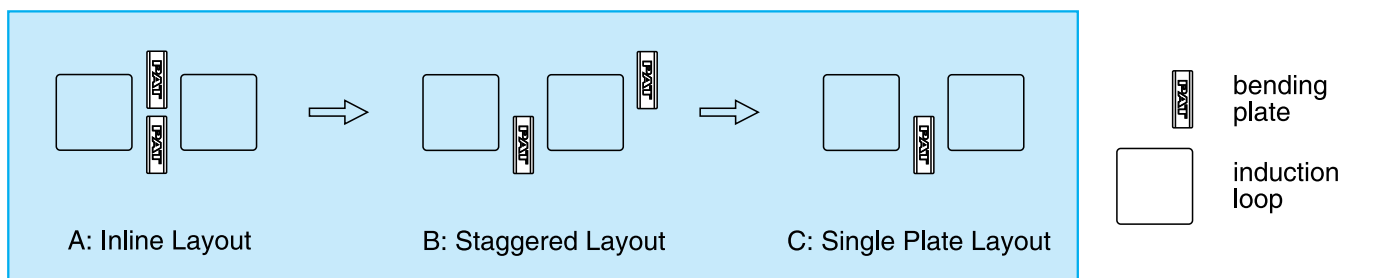
Weight	114 kg (251 lb)
Sensor Dimensions	507 x 1750 mm (20 x 69 in)
Nominal Load	10,000 kg (22,000 lb)
Carrying Capacity	15,000 kg (33,100 lb)

Model: WP 1950

Weight	127 kg (279 lb)
Sensor Dimensions	507 x 1950 mm (20 x 77 in)
Nominal Load	10,000 kg (22,000 lb)
Carrying Capacity	15,000 kg (33,100 lb)

Model: WP 1750 15T

Weight	131 kg (288 lb)
Sensor Dimensions	507 x 1750 mm (20 x 69 in)
Nominal Load	15,000 kg (22,000 lb)
Carrying Capacity	22,500 kg (49,500 lb)



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