ADR-WIM Piezo Weigh-in-Motion Module

The technically advanced multi-channel ADR-WIM card from Peek Traffic can be installed in the ADR-1000 Plus, ADR-2000 Plus, or ADR-3000 Plus series of counters/classifiers, in either the semi-permanent or permanent configurations. Installing a WIM card enables an ADR to emulate the dynamic weighbridge method of weighing heavy commercial vehicles at high speeds while retaining the full functionality and ease of use of the ADR interface. Using one or two simply installed subsurface piezoelectric weighing sensors (with optional secondary sensors), the following types of data can be accurately collected: arrival time, vehicle speed and classification, gross vehicle weight, volumetric flow, individual axle weights and spacings, overload indications, Equivalent Standard Axle Loadings (ESALs), gap and headway, all in either binned or per-vehicle records.

When short-term data is required, temporary stick-down sensors may be installed for cost-effective surveys.

Site monitoring includes a four-lane capability on the ADR-1000/2000 Plus units, or an eight-lane capability when used in the ADR-3000 Plus unit. Data storage is provided by internal memory or by removable SD cards of up to 4 Gb capacity. Sites are generally battery powered, but solar or line power backups can extend your monitoring time indefinitely. The RS232 port, when connected to a PC, reports real-time data for alarm analysis.

System Flexibility

The use of simply installed plug-in modules allows flexible installation of multilane configurations to suit specific site demands and provides ease of expansion when first ordered, or at a later date.

Any existing ADR-1000 Plus, ADR-2000 Plus, or ADR-3000 Plus can be upgraded in the field for WIM operations. The upgrade is simple and cost-effective. Plug-in WIM modules, easy-to-connect wire harnesses and flash-loaded firmware are the major components required for the upgrade.

Features

- Simultaneous operation on up to 8 lanes
- Programmable vehicle classification schemes
- Per vehicle WIM - alarm output
- On-scale sensors detect lane straddling
- Dynamic auto-calibration
- User-friendly setup via PC, data card or keyboard
- Accepts SD memory cards up to 4 Gb
- High speed telemetry communications
- Solar rechargeable battery operation

www.peektraffic.com
## Specifications

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Weight</strong></td>
<td>Portable ADR-2000-WIM recorder: Typically 17.6 pounds (8 kg) with battery. Permanent ADR-3000-WIM rack recorder: Typically less than 15 pounds (7 kg)</td>
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<tr>
<td><strong>Size</strong></td>
<td>ADR-2000 P-WIM: 6.5”H × 9.5”W × 13”D (162 × 242 × 332 mm)  &lt;br&gt; ADR-3000 P-WIM: 5.25”H × 10” to 19”W × 9.35”D (135 × 225 to 480 × 240 mm)</td>
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<tr>
<td><strong>Temperature</strong></td>
<td>-40°F to +165°F (-40°C to +74°C)</td>
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<tr>
<td><strong>Display (optional)</strong></td>
<td>20 digit × 4 line liquid crystal display and keypad</td>
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<tr>
<td><strong>Inputs</strong></td>
<td>ADR-1000-WIM: Up to 8 weigh-in-motion inputs  &lt;br&gt; ADR-2000-WIM: Up to 16 weigh-in-motion inputs, temperature input  &lt;br&gt; ADR-3000-WIM: Sensor card inputs (in multiples of eight) of various types allowed, up to 24 weigh-in-motion inputs, temperature input</td>
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<tr>
<td><strong>Time Intervals</strong></td>
<td>1, 2, 5, 6, 10, 15, 30 and 60 minutes  &lt;br&gt; 2, 3, 6, 12 and 24 hours, real time  &lt;br&gt; Four daily peak periods available</td>
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<tr>
<td><strong>Microprocessor</strong></td>
<td>Intel 80C186</td>
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<td><strong>Data Capacity</strong></td>
<td>Expandable up to 4 GB</td>
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<td><strong>Accuracy</strong></td>
<td>Better than 90% confidence on gross weight, exceeds the ASTM standard</td>
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## Options

**ADR-1000-WIM:**
- Up to 4 lanes of WIM
- Solar power
- PCMCIA memory card up to 8 MB
- FHWA/ECC or custom classification tables

**ADR-2000-WIM:**
- Up to 4 lanes of WIM
- Solar power
- SD memory card up to 4 GB
- FHWA/ECC or custom classification tables

**ADR-3000-WIM:**
- Up to 8 lanes of WIM
- Solar power
- Front panel keyboard and display
- SD memory card up to 4 GB
- FHWA/ECC or custom classification tables