

## **i** TECHNICAL INFORMATION

### ACCURACY DATA

|                        |              |
|------------------------|--------------|
| Gross Vehicle Weight   | ±10%         |
| Individual Axle Weight | ±15%         |
| Group Axle Weight      | ±15%         |
| Traffic Volume         | >99.5%       |
| Speed                  | ±1.5%        |
| Length                 | ±8%          |
| Headway                | ±7%          |
| Speed Range            | 1 to 200 kph |

**Note:** Gross vehicle and axle weight accuracy with 90% confidence. Axle weight accuracy assumes road sensors installed in a surface compliant with COST 323 Class B(10) or ASTM E1318-02 specifications.

### CLASSIFICATION ACCURACY

FHWA, UK DFT, AUSTRROADS, USER DEFINABLE

|                       |      |
|-----------------------|------|
| Motorbike             | ±95% |
| Cars & Vans           | ±97% |
| Cars & Vans + Trailer | ±97% |
| Rigid HGV             | ±98% |
| Articulated HGV       | ±99% |
| Draw-Bar Trailers     | ±99% |
| Buses & Coaches       | ±97% |

### LANE CONFIGURATIONS

|                  |                    |
|------------------|--------------------|
| Piezo-Loop-Piezo | WIM or AVC         |
| Piezo-Piezo      | WIM, AVC, Bicycles |

### VBV DATA RECORDED

|                         |                      |
|-------------------------|----------------------|
| Time & Date             | Direction of Travel  |
| Site Identity Code      | Vehicle Count Number |
| Lane Number             | Vehicle Class        |
| Individual Axle Weights | Gross Vehicle Weight |
| Vehicle Speed           | Vehicle Length       |
| Inter-axle Spacing      | Wheelbase            |
| Vehicle Gap             | Headway              |
| Equivalent Single Axle  | Validity Code        |

### STORAGE CAPACITY

256 Mb Flash Mass Storage Media Drive  
Upgradeable to 4G

25,000,000 Vehicle VBV WIM Records – 256Mb  
40,000,000 Vehicle VBV AVC Records – 256Mb

### INPUT/OUTPUT PORTS

|               |                                 |
|---------------|---------------------------------|
| USB           | Laptop (Front Panel Mounted)    |
| RS232         | Modem                           |
| RS232         | Printer or ANPR/CCTV Control    |
| RS485         | Data Transmission               |
| Dry Contact   | Six N.O.                        |
| Switch Inputs | Two (e.g. door tamper switches) |

### POWER

85-264VAC @ 47-440Hz  
12V Battery – Rechargeable via HI-TRAC 100  
Solar Panel, Battery & Charge Regulator



### SOFTWARE

HI-COMM 100 and HI-COMM EZY Compatible:  
Data Download, Analysis, Real Time VBV View,  
Report Generation & Diagnostics



Drakewell C2, C2 Web Reports



### ROAD INSTALLED ITEMS

Piezo electric sensors and inductive loop sensors permanently installed in the highway.

### DIMENSIONS & WEIGHT

|     |                                       |
|-----|---------------------------------------|
| W = | 430mm (485mm with rack mount flanges) |
| D = | 280mm (325mm with handles)            |
| H = | 180mm                                 |
|     | 7 kg                                  |

### SHIPPING DIMENSIONS & WEIGHT

|  |                           |
|--|---------------------------|
|  | 550 x 430 x 260mm (W D H) |
|  | 9kg                       |

### ✉ CONTACT US

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DESIGNERS & MANUFACTURERS OF TRAFFIC  
DATA COLLECTION, MONITORING AND  
ENFORCEMENT SYSTEMS

# BRIDGE LOAD

## MONITORING AND ENFORCEMENT



### INTRODUCTION

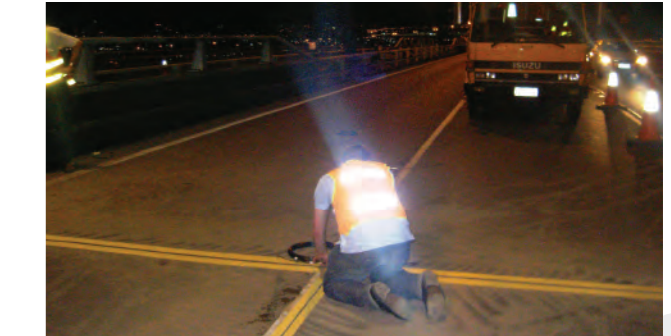
High Speed Weigh-in-Motion Bridge Load Monitoring and Enforcement systems provide a low cost means of recording bridge transit vehicle classification and axle load data without interruption to traffic flow.

In the standard configuration two piezo electric sensors and one inductive loop are installed in the highway per lane of detection.

The system can be used as a statistical data device to record highway traffic loading or it can also be used as a screening weighbridge to identify overloaded vehicles in the traffic stream.

The HI-TRAC® 100+ can be interfaced to traffic signals or diversion signs to intercept overloaded vehicles and to ANPR or CCTV camera systems.

TDC Systems notable bridge projects include the Humber Bridge, Kincardin Old Bridge, Whitecart Bridge, North Kessock Bridge, Raith Bridge, Erskine Bridge and the Westgate Bridge in Melbourne, Australia.



### FEATURES

- Weigh-in-Motion (WIM) & Automatic Vehicle Counter/Classifying (AVC) operation using advanced loop profiling techniques
- Classification of over 100 unique vehicle types as well as supporting UK DFT, FHWA, AUSTRROADS class schemes
- Vehicle-by-Vehicle (VBV) data storage
- Abnormal Vehicle Detection (up to 25 Axles)
- GPRS, GSM Telemetry options
- Automatic Number Plate Recognition (ANPR) and CCTV camera interface
- Wind Speed and Wind Direction Monitoring
- Ground Vibration Monitoring
- Air Pollution Monitoring interfaces including PM10, NO<sub>2</sub>



