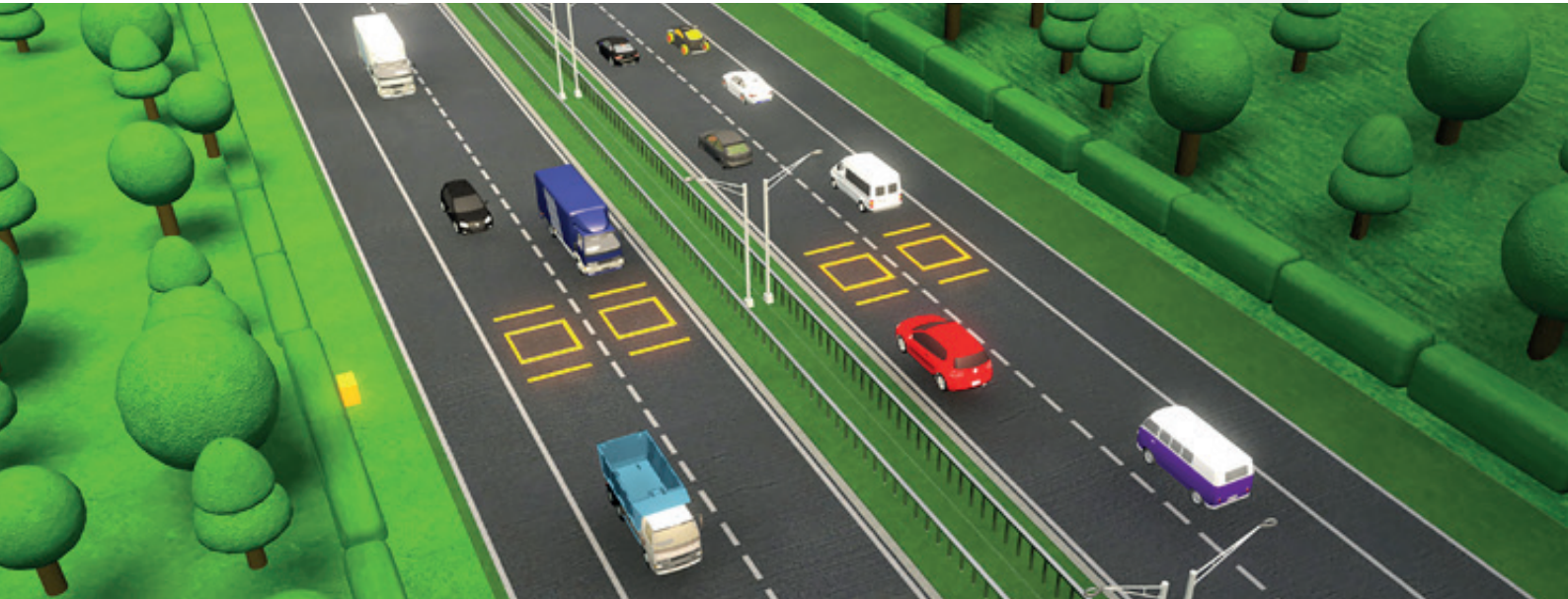


HI-TRAC[®] TMU4

HIGH SPEED CLASSIFICATION & WEIGH-IN-MOTION SYSTEM

- Supports multiple array configuration
- Transmits data via GPRS with real-time view
- Integrates with ANPR, CCTV and diversion sign



OVERVIEW

The HI-TRAC[®] TMU4 is a high speed traffic data collection system recording vehicle classification and axle load data without interruption to traffic flow.

The HI-TRAC[®] TMU4 incorporates embedded Ethernet with TCP/IP stack, VPN and FTP as well as extensive 8 Gb data storage and thus provides high-end functionality at a reasonable cost.

The standard configuration of two Class 1 piezo electric sensors and one inductive loop installed in the highway per lane provides axle weight data to COST 323 Class B(10) accuracy in addition to inter-axle spacing and vehicle speed data.

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.

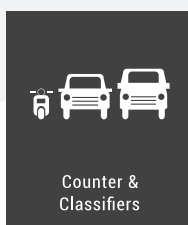
The HI-TRAC[®] TMU4 can be interfaced to traffic signals or diversion signs to intercept overloaded vehicles and to ANPR or CCTV camera systems.

The HI-TRAC[®] TMU4 uses TDC Systems advanced loop profiling techniques to improve vehicle classification accuracy and weight data is significantly improved with advanced automatic temperature compensation algorithms incorporated as standard.

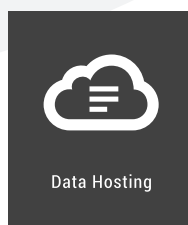
KEY FEATURES



Weigh-in-Motion



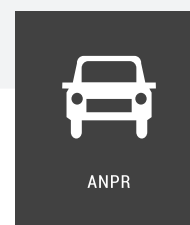
Counter & Classifiers



Data Hosting



Multiple Lane Operation



ANPR



Air Pollution Monitoring

BENEFITS

- Weigh-in-Motion (WIM) and Automatic Vehicle Counter/Classifying (AVC) operation
- Classification of over 100 unique vehicle types
- Vehicle-by-Vehicle (VBV) data storage
- Advanced temperature compensation algorithm ensuring accuracy of weight data
- Two to Sixteen Lane configuration options
- Laptop (USB2), Modem (RS232) Ports and Data (RS485) port
- Ethernet 10/100 Mb Supports TCP/IP and DHCP Protocols

INSTALLATION

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

- Telemetry output module for data download via mobile telephone network (GSM/GPRS)
- TCP/IP and DHCP Protocols 4Gbyte flash drive data storage
- Environmental monitoring interfaces (includes pass-by noise, wind speed/direction, air temperature, rain, vibration)
- Air Quality Monitoring Interface (includes NO₂, CO, PM10)
- Automatic Number Plate Recognition (ANPR) and CCTV camera interface

SOFTWARE

- HI-COMM 100 Compatible
- Data Download, Analysis, Real Time VBV View, Report Generation & Diagnostics
- Data hosting and reporting service

TECHNICAL SPECIFICATIONS

ACCURACY DATA

Gross Vehicle Weight	±10 %
Individual Axle Weight	±15 %
Group Axle Weight	±13 %
Traffic Volume	>99.5 %
Length	±8 %
Headway	±7 %
Speed	±1.5 %
WIM Speed Range	20 – 180 kph

LANE CONFIGURATIONS

Piezo-Piezo	Cycles
Piezo-Loop-Piezo	AVC, WIM, Cost 323 C (15) to B (10)
Piezo-Loop-Piezo-Piezo-Loop-Piezo	WIM, Cost 323 B(7)

VBV DATA RECORDED

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

POWER SUPPLY

85–264 VAC @ 47–440 Hz
12 V Battery – Rechargeable via HI-TRAC TMU boost charger and power supply
Solar Panel, Battery & Charge Regulator
Operating temperature -25 to +85 Deg °C

STORAGE CAPACITY

Standard 8 Gb MicroSD data storage
circa. 800 Million VBV WIM Records

CLASSIFICATION ACCURACY

FHWA, UK DFT, AUSTROADS, user definable	
Motorbike	>95 %
Cars & Vans	>97 %
Cars & Vans + Trailer	>97 %
Rigid HGV	>98 %
Articulated HGV	>99 %
Draw-Bar Trailers	>99 %
Buses & Coaches	>97 %

INPUT/OUTPUT PORTS

USB2	Laptop
RS232	Modem
RS232	Printer, ANPR/CCTV Control
RS485	Data Transmission
Ethernet	10/100 Mb
Dry Contact	6 N.O.
Switch Inputs	2 (e.g. door tamper switches)

DIMENSIONS & WEIGHT

W – 430 mm (485 mm with rack mount flanges)
D – 280 mm (325 mm with handles)
H – 180 mm
Weight: 7 kg

SHIPPING DIMENSIONS & WEIGHT

W – 550 mm D - 430 mm H – 260 mm
Weight: 9 kg

