



# HI-TRAC<sup>®</sup> TMU4

## HIGH-SPEED TRAFFIC WEIGH-IN-MOTION & CLASSIFICATION SYSTEM

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

The HI-TRAC<sup>®</sup> TMU4 incorporates embedded Ethernet with TCP/IP stack, VPN and FTP as well as extensive 4Gbytes 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<sup>®</sup> TMU4 can be interfaced to traffic signals or diversion signs to intercept overloaded vehicles and to ANPR or CCTV camera systems.

The HI-TRAC<sup>®</sup> 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.

## FEATURES

- Weigh-in-Motion (WIM) & 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
- Telemetry output module for data download via mobile telephone network
- Ethernet 10/100MB Supports 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 NO<sub>2</sub>, CO, PM<sub>10</sub>)
- Automatic Number Plate Recognition (ANPR) and Camera interface





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### TECHNICAL INFORMATION

#### ACCURACY DATA

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

#### 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

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

#### INPUT/OUTPUT PORTS

USB2	Laptop
RS232	Modem
RS232	Printer, ANPR/CCTV Control
RS485	Data Transmission
Ethernet	10/100MB
Relay Drive	16
Switch Inputs	8 (e.g. door tamper switches)

#### STORAGE CAPACITY

256 Mb Flash Mass Storage Media Drive  
Upgradeable to 4Gb

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

#### POWER

85-264VAC @ 47-440Hz  
12V Battery – Rechargeable via HI-TRAC  
TMU boost charger and power supply.  
Solar Panel, Battery & Charge Regulator

#### ROAD INSTALLED ITEMS

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

#### DIMENSIONS & WEIGHT

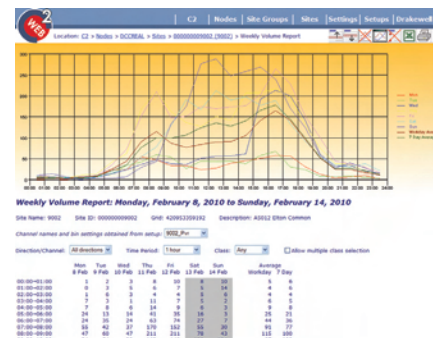
W - 430mm  
(485mm with rack mount flanges)  
D - 280mm  
(325mm with handles)  
H - 180mm  
7 kg

#### SHIPPING DIMENSIONS & WEIGHT

550 x 430 x 260mm (w d h)  
9 kg

### SOFTWARE

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



Drakewell C2, C2 Web Reports



### CONTACT US

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