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

TRAFFIC SYSTEMS

HI-TRAC® TMU4

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

REG. NO.	CLASSIFICATION	WEIGHT	SPEED	LANE NO.
VX12 RFV	ARTICULATED HGV	34,860 KG	86 KPH	2

SYSTEM DESCRIPTION

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 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® 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.

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_2, CO, PM10)
- Automatic Number Plate Recognition (ANPR) and Camera interface

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: Vehicle and axle weight accuracy with 90% confidence. (Axle weight accuracy assumes road sensors installed in a surface compliant with COST 323 or ASTM E1318-02 specifications).

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%

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

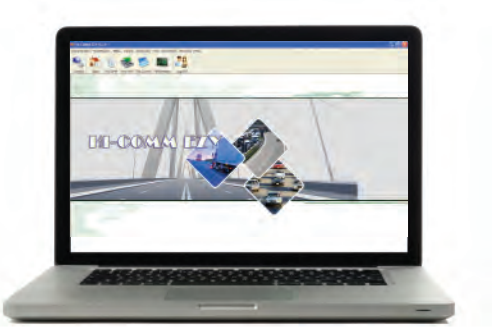
25,000,000 Vehicle VBV WIM Records – 256Mb
40,000,000 Vehicle VBV AVC Records – 256Mb

INPUT/OUTPUT PORTS

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

POWER

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



SOFTWARE

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

Drakewell C2, C2 Web Reports

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

CONTACT US

TDC Systems Ltd.
30 Lynx Cresent, Weston Industrial Estate
Weston-super-Mare, North Somerset BS24 9BP
England, United Kingdom

T: +44 (0)1934 644299 F: + 44 (0)1934 644255
E: sales@tdcsystems.co.uk www.tdcsystems.co.uk