

HI-TRAC[®] EMU

EVENT MONITORING UNIT & VEHICLE CLASSIFICATION SYSTEM



SYSTEM DESCRIPTION

The HI-TRAC[®] EMU is a low power traffic data collection system with upgradeable options configurable to:

- Loop Volumetric Counter
- Loop Speed and Length Classifier
- Loop Profiling Classifier
- AVC with Bicycle and Motorcycle Classifier
- Weigh-in-Motion System
- Event Monitoring

The unit incorporates interfaces to both piezo electric sensors, inductive loop sensors and a road installed temperature probe.

The HI-TRAC[®] EMU can be powered from either mains supply or solar panel and associated battery & charge regulator.

GSM and GPRS communications options are available. A small, vandal proof GSM antenna is available for installation on the top of the roadside cabinet.

“ HI-TRAC EMU's have been deployed on motorcycle safety routes throughout the Peak District in the UK. The systems detect motorcycles entering routes & activate warning signs to the motorcyclists & on-coming drivers. ”

FEATURES

- 8 Lanes LOOP Volumetric Counting (N, N+1)
- 4 Lanes LOOP-LOOP Speed & Length
- 2 Lanes PIEZO-LOOP-PIEZO AVC/WIM
- 4 Lanes LOOP-PIEZO-LOOP AVC/WIM
- Vehicle-by-Vehicle (VBV) Data Recording
- Euro 6 Classification or User Defined
- Traffic Alerting, Event Monitoring and Incident Detection
- Communications via Modem & Landline or GSM/GPRS for Data Download, Real Time View of traffic data and remote diagnostics via HI-COMM 100 software
- Front panel laptop serial connection
- Radio transmitter option for VMS activation (250 Metre Range)



i TECHNICAL INFORMATION

WIM ACCURACY

Piezo-Loop-Piezo	±10% GVW
Loop-Piezo-Loop	±15% GVW
WIM 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.

AVC ACCURACY

Volume	>99.5%
Length	±8%
Headway	±7%
Speed	±1.5%
AVC Speed Range	1 to 200 kph

LANE CONFIGURATIONS

Loop	Volumetric
Loop-Loop	AVC
Loop-Piezo-Loop	AVC or WIM
Piezo-Loop-Piezo	WIM

LANE CAPACITY

8 Lanes	Loop Volumetric
4 Lanes	Loop-Loop
4 Lanes	Loop-Piezo-Loop
2 Lanes	Piezo-Loop-Piezo

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

4 Mb Battery backed RAM
Upgradeable to 6Mb or 8Mb

400,000 Vehicle VBV Records – 4Mb RAM

OUTPUT PORTS

RS232	Laptop
RS232	Modem

POWER

EMU Supply	6V DC
EMU Power Consumption	<0.1W
Cabinet Mounted Solar Panel	10W



SOFTWARE

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



Drakewell C2, C2 Web Reports



ROAD INSTALLED ITEMS

Permanently installed piezo electric sensors and/or
inductive loop sensors.

DIMENSIONS & WEIGHT

270 x 130 x 230mm (w d h)
3 kg

SHIPPING DIMENSIONS & WEIGHT

450 x 450 x 350mm (w d h) approx
4 kg

CONTACT US

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