

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



MOTORCYCLE

ROUTE SAFETY SYSTEM



INTRODUCTION

TDC Systems has designed, installed and commissioned the first Motorcycle Route Safety System in the UK for Derbyshire County Council. The purpose of the system is to provide detailed information on motorcycle activity on Derbyshire's Biker Hotspots where winding roads and epic scenery make for an exhilarating ride. These hotspots have been identified as stretches of road in the Derbyshire countryside where bikers are regularly coming to grief.

The data is provided in real-time to the Partners of the Derbyshire Road Safety Partnership and is used to enable decisions to be made on policy, enforcement and publicity campaigns, as well as to provide a technique to measure the effectiveness of the schemes and projects.

Motorcycle casualties on Derbyshire roads represent a high proportion of Killed and Seriously Injured (KSI) casualties. With this unique system some key routes in Derbyshire that are responsible for a significant proportion of the KSI's are accurately monitored for the very first time.



SYSTEM DESCRIPTION

The system is designed around the HI-TRAC® EMU Event Monitoring Unit and Automatic Traffic Counter. The EMU is connected to inroad piezoelectric sensors, inductive loop sensors and temperature probe. Additional transducers include a wet/dry indicator that can be used to provide valuable traffic incident information.

The combination of piezoelectric sensors and inductive loops provide for highly accurate motorcycle detection and classification of all road traffic. Weigh-in-Motion data can also be provided if required.

On detection of speeding motorcycles or other infringing road traffic the system is programmed to activate a variable message sign (VMS) via a radio transmitter, located in the roadside cabinet. The VMS is located up to 250M from the sensor installation towards the motorcycle safety route.

The HI-TRAC® EMU can be powered from either mains supply or solar panel and associated battery & charge regulator. Depending on site location a single 10W panel mounted on the roadside cabinet roof is sufficient to power the EMU autonomously even with real time telemetry activated.

