

HI-TRAC[®] EMU3

EVENT MONITORING UNIT FOR WEIGH-IN-MOTION AND CLASSIFICATION SYSTEMS



OVERVIEW

The HI-TRAC[®] EMU3 is an innovative, results-driven, and versatile event monitoring and detection unit for weigh-in-motion and classification systems.

Ideal for use across highways or throughout urban environments, detection options can include any one or combination of the following:

- Weigh-in-motion
- Axle classification
- Loop profiling classification
- Cycle classification
- Pedestrian detection

With multiple array configuration options, sensors and inductive loops are permanently installed in the highway or road – a cost saving measure due to minimal investments in installation and maintenance. In addition, its low power consumption is ideal for sustainable power supplies.

The HI-TRAC EMU3 has interfaces for multiple sensor types such as piezo-electric, inductive loop, Quarts strain gauge, and in-road temperature probes.

Optional triggered outputs facilitate integration with technologies such as ALPR/ANPR cameras and cycle signs.

BENEFITS

- Detect a variety of vehicles, cycles, or pedestrians
- High-accuracy monitoring for single or multiple lanes
- Allow safe, continuous flow of traffic, bicycles, and pedestrians without reduced speed or stopping
- Monitor and access critical traffic information in real-time or for future comprehensive reporting
- Communicate via 3G/4G/Ethernet (TCP/IP) for data download, diagnostics, and configuration
- Interface with ease to third-party solutions such as cameras and cycle signs



HIGHLY
ACCURATE
DETECTION



REAL-TIME
TRAFFIC
DATA

ACCURACY AND CONFIGURATIONS

WIM ACCURACY

P-L-P COST 323 C(15) ± 15% GVW

qLq COST 323 B(10) ± 10% GVW

QLQ COST 323 A(5) ± 5% GVW

P = Piezo polymer sensor

Q = Full axle strip piezo quartz sensor

q = Half strip wheel piezo quartz sensor

L = Inductive loop

AVC ACCURACY

Volume 99%

Gap ± 8%

Speed ± 1.5%

Length ± 8%

Headway ± 7%

LANE CONFIGURATION

Listed configurations are available across 8 lanes.

| Weigh-in-Motion | AVC |
|-----------------------|-----------------------|
| Piezo-loop-piezo | Piezo-loop-piezo |
| Loop-piezo-piezo-loop | Loop-piezo-loop |
| Piezo-piezo | Loop-loop |
| | Loop-piezo-piezo-loop |
| | Piezo-piezo |
| | Bicycle (piezo) |

NOTE: Piezo polymer WIM sensor arrays require an in-road temperature probe to compensate for sensor output variations with temperature change.

DATA REPORTS & HOSTING

Reports: Excel/csv, graphs, and TMAS

Hosting: C2 Web, MS2, and Transmetric

OPTIONS

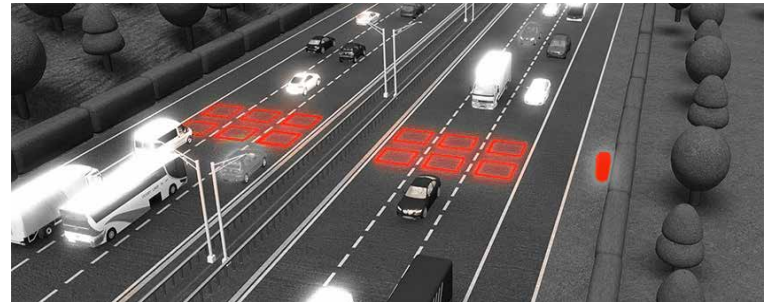
Traffic alerting, event monitoring, and incident detection

Vehicle-by-Vehicle (VBV) data recording

Pre-programmed or user-defined classification schemes



HI-TRAC® EMU3 unit



TECHNICAL SPECIFICATIONS

Storage capacity: Standard 8GB MicroSD data storage

Up to 365 days data storage

Classification schemes:

FHWA 13 class scheme

UK DfT 20 class scheme

AUSTROADS

NRA 7 class scheme

EURO 6

User configurable

Up to 100 classes

Input/Output ports:

USB Laptop

RS-232 modem I, RS-232 external modems, gateways

RS485 auxiliary port environmental sensors

2 channel OPTO output sign, camera activation

2 channel OPTO input cabinet switch, over height detection pedestrian sensor

Environmental:

Working temperature:

-40°C to +75°C (-40°F to +167°F)

Storage temperature:

-40°C to +85°C (-40°F to +185°F)

Power supply:

EMU supply 6V DC 12V DC configurable

EMU power consumption 0.1W

Cabinet mounted solar panel 10W

AC mains via low voltage adapter

Dimensions: (H x W x D)

229 x 269 x 102 mm (9" x 10.6" x 4")

Weight:

5 kg (11 lbs)