



# VIP/D – DATA MONITOR

THE MODULE FOR TRAFFIC DATA ACQUISITION, FLOW MONITORING & LOOP EMULATION



*The VIP/D combines traffic flow monitoring, traffic data collection and loop emulation all in one single board.*

The VIP/D board accurately monitors traffic flow and provides a wide range of individual traffic data. The user can easily specify several configuration and detection parameters. He can even decide on the amount of information to be displayed on the monitor. All of these options are available via an extremely user-friendly, menu-driven set-up procedure using a VIP keypad or portable PC. The convenience of a remote set-up via the communication board (VICCOM/E, VIEWCOM/E) or the TMS PC-software is also possible. All alarms and flow data can be permanently monitored over a serial port.

## **TRAFFIC DATA ACQUISITION**

The VIP/D provides all relevant traffic data such as volume, speed, gap time, headway, occupancy, concentration and classification. The VIP/D can even store data on board in non-volatile memory.

## KEY BENEFITS

- » FLOW MONITORING AND TRAFFIC DATA ACQUISITION AND LOOP EMULATION
- » HIGH RELIABILITY
- » STORAGE OF ALL RELEVANT TRAFFIC DATA
- » DATA STORAGE ON BOARD

## TRAFFIC DATA ACQUISITION

- » VOLUME, SPEED, GAP TIME, HEADWAY, OCCUPANCY, CONCENTRATION, CLASSIFICATION
- » ALL DATA AVAILABLE PER LANE

## FLOW MONITORING

- » DISTINCTION BETWEEN DIFFERENT TYPES OF TRAFFIC FLOW
- » SPEED DROP & WRONG-WAY DRIVERS

## LOOP EMULATION

- » PULSE OUTPUT SIMILAR TO TRADITIONAL LOOPS IN ADDITION TO TRAFFIC DATA



*Sudden speed variations are detected within seconds to help preventing secondary accidents.*

VIP/D automatically distinguishes 5 types of traffic flow (levels of service) based on flow speed and zone occupancy. Within seconds it detects wrong-way drivers or sudden speed variations.

## **LOOP EMULATION**

The VIP/D can emulate traditional double loop detectors for 4 lanes. In addition to the traffic data, it provides pulses similar to those provided by inductive loops.



8 VIP boards integrated into a standard 19" rack.

## SPECIFICATIONS

### DIMENSIONS

- 19" rack compatible Euro Card

### COMMUNICATION

- RS-232C service ports for set-up
- RS485 communication within a rack for data acquisition

### INPUTS

- Composite video 75 Ω 1Vcc CCIR/EIA
- Power Supply
- Reset button on front panel

### OUTPUTS

- Analog video output with overlay of system info data & detection lines or zones
- Auto-diagnostic LED indicators
- 8 optically isolated open-collector outputs
- 1 optically isolated open-collector error output

### CONNECTOR

- DIN 41612 - 48 pins F (male)

### POWER SUPPLY & CONSUMPTION

- +5V dc (600mA) to +26V dc (200mA)

### ENVIRONMENTAL

- -34°C à +74°C
- 0 à 95% relative humidity non-condensing

### EMC

- EN 55022 - EN 50082-2 Industrial

## TYPICAL INSTALLATION

- » For a typical installation, several VIP boards (possibly serving different types of applications) are integrated into a standard 19" rack.
- » Communication options of the boards are serial (RS232/RS485), Ethernet or open collector outputs.
- » A communication board (VIEWCOM/E, VICCOM/E) provides remote monitoring, remote set-up and the ability to change detector configurations remotely.
- » The communication board uses dialup or leased lines, fibre optic or other means for communication.
- » On the host computer at the control centre, the WATTS software (Wide Area Traffic Telematics Server) monitors the detection systems.

## TRAFFIC DATA ACQUISITION

- » VIP/D collects relevant traffic data for up to 8 lanes.
- » VIP/D provides following data per interval:
  - ⇒ Volume (absolute numbers) per length class and per lane
  - ⇒ Average speed (km/h or mph) per length class and per lane
  - ⇒ Average gap time (1/10 sec) per length class and per lane
  - ⇒ Average headway (m) per lane
  - ⇒ Occupancy (%) per lane
  - ⇒ Concentration (vehicles/km) per lane
  - ⇒ Average length (m) per lane
  - ⇒ Confidence level (0-10) per lane
- » VIP/D can store user-defined data intervals in non-volatile memory.
- » Loop emulation for up to 4 lanes.

## FLOW MONITORING

- » VIP/D monitors flow speed between 0 and 150 km/h for up to 8 lanes.
- » VIP/D also monitors the zone occupancy of the detection area.
- » VIP/D automatically distinguishes 5 types of traffic flow.
- » VIP/D detects both wrong-way drivers and sudden speed variations within seconds.
- » During set-up, alarm levels can be programmed for
  - ⇒ Speed
  - ⇒ Speed drop
  - ⇒ Occupancy
  - ⇒ Image quality

DATA SUBJECT TO ALTERATION WITHOUT NOTICE OR OBLIGATION.

**YOUR CONTACT**