

VIP/D - DATA MONITOR

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

VIP/D DATA MONITOR

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



VIP/D generates individual traffic data per lane

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 WATTS 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.

FLOW MONITORING

The VIP/D measures both the traffic flow speeds between 0 and 150 km/h for up to 8 lanes and the zone occupancy of the detection area.



Sudden speed variations are detected within seconds

It 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

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.

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.







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

 ${\it DATA~SUBJECT~TO~ALTERATION~WITHOUT~NOTICE~OR~OBLIGATION}.$

YOUR CONTACT

