



VIP3D.1 & VIP3D.2 Vehicle Presence & Data Detector

The Original 170, NEMA TS-1 & TS-2 Plug-In Module, 2nd Generation



VIP3D.1 & 3D.2 FUNCTIONALITY

The VIP3D Video Image Processor provides traffic data and information on the presence of vehicles approaching or waiting at the intersection.

- » Vehicle presence detection
- » Traffic data collection:
Counts, Speeds, Classification, Occupancy, Density, Headway, Gap time
- » Alarm events
- » Wrong way driver detection
- » Queue length
- » Turning movement count

KEY BENEFITS

- Presence detection identical to the field-proven VIP3.1 & 3.2 module
- Data acquisition identical to the field-proven VIP/D module
- Direct plug-in module for Type 170, NEMA TS-1 & TS-2 controller cabinets
- VIP3D.2 is a 2-camera unit.
- 24 outputs and 20 inputs via expansion modules
- System connection via VIEWCOM/E (Ethernet)
- VIP3.x Link Software via serial communication RS232
- Real time video output on module
- 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 and wrong-way drivers

LOOP EMULATION

- Pulse output similar to traditional loops in addition to traffic data.
- VIP3D.2 and Expansion Modules (4 I/O and 2 I/O)
- Remote image provided by VIEWCOM/E.



'Virtual' vehicle presence detection zones



Remote image provided by VIEWCOM/E

TRAFFIC DATA ACQUISITION

The VIP3D provides all relevant traffic data such as volume, speed, gap time, headway, occupancy, concentration and classification. The VIP3D can even store data on board in non-volatile memory.

It automatically distinguishes five 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

VIP3D can emulate traditional double or single loop detectors. In addition to the traffic data, it provides pulses similar to those provided by inductive loops.

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VIP3D and Expansion Modules (4 I/O and 2 I/O)

Dimensions

- TS 2 compatible card rack units

Serial Ports

- RS-232C service ports for setup, data collection & firmware update

Inputs

- Composite video 75Ω1Vt CCIR/EIA
- Power Supply
- Reset & recall button on front panel

Outputs

- Analog video output with overlay of system info data & detection zones
- Auto diagnostic LED indicators
- VIP3D.2 Main board: 4 optically isolated open-collector outputs
- Expansion modules 2 I/O & 4 I/O: 2 or 4 digital in/outputs (with dip switches for selection of in/outputs)

Connector

- Double row 22 pins EDGE (NEMA TS 2-1992)

Power Supply & Consumption

- 10.8v to 26.5v DC
- VIP3D.2 with 200mA at 24v
- VIP3D.1 with 160mA at 24v
- 4 I/O with 30mA at 24v

Environmental

- -29°F to +165°F (34°C to +74°C)
- 0 to 95% relative humidity - non-condensing

VIP3D.1 & VIP3D.2 PRESENCE & DATA DETECTION

- » VIP3D.1 monitors 1 camera. VIP3D.2 monitors 2 cameras.
- » VIP3D.1 provides up to 24 presence detection zones. VIP3D.2 provides up to 20 presence detection zones per camera.
- » Each presence zone call can be delayed, extended or combined with an input to inhibit the call.
- » Queue length measurements and directional counts on the intersection.
- » Combination of outputs and inputs using Boolean functions AND, OR and NOR.
- » The VIP 3D.1 provides 8 data detection zones. The VIP 3D.2 provides 4 data detection zones per camera.
- » Data: *count, speed, classification, occupancy, density, headway and gap time.*
- » Generation of alarm events like: *speed alarms (4 service levels), speed drop, wrong way driver, queue length threshold and quality alarm.*
- » Double and single data loop simulation.
- » Per zone, detection can be made direction sensitive.
- » Single zones can be edited without disturbing the detection.
- » Each VIP3D can control up to 24 outputs (4 per board and 20 via the I/O extension boards) and 20 inputs (four for each of the five I/O extension boards).
- » The VIP3D stores up to four configurations per camera.
- » Internal non volatile memory database.
- » The VIP3D link software handles
 - Configuration up and download
 - Data download (database or individual data monitoring)
 - Firmware upload via RS232 port
 - Event download

FLOW MONITORING

- » VIP3D monitors four to eight lanes flow speed between 0 and 100 mph.
- » VIP3D also monitors the zone occupancy of the detection area.
- » VIP3D automatically distinguishes five types of traffic flow.
- » VIP3D 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.

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