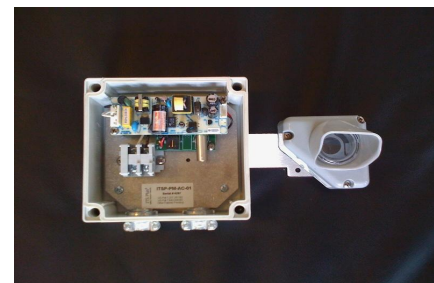


Innovative VIVDS Solutions from ITS Plus

- **Advanced VIVDS Cameras**
 - o Addresses the “Weak Link” in VIVDS systems
 - “Never Clean” camera lens
 - Outstanding MTBF, ultra low maintenance
 - 5 year warranty (covers lightning, hurricane, tornado)
 - o Mast Arm or Signal Mount, AC or DC options
- **Power Line Modem Option (Coax also available)**
 - o Installs in minutes
 - o Utilizes existing unshielded field wiring – no cables to pull
- **One or Two Channel VIVDS Option**
 - o Up to 30 zones
 - o TS-1, TS-2 or 170/2070 card files
 - o Cutting-edge design enables a \$1,000 four approach intersection
- **Advanced Architecture Significantly Reduces**
 - o Installation time
 - o Product cost + ongoing maintenance
- **Future Upgrade Paths**



Advanced Cameras with Multi-Function PLM/VIVDS Cards

ITS Plus’s innovative designs address the problems of price, performance, reliability and maintenance commonly associated with traditional VIVDS systems. By combining advanced cameras with Power Line Modem technology/VIVDS software ITS Plus has created a fully interoperable and valued added product family at sub – commodity prices.

Advanced VIVDS camera optimized with Multi-Function DSP based PLM/VIVDS cards

Traditional VIVDS systems utilize cameras which are inherently prone to high maintenance and failure. Cameras often require frequent lens cleaning and re-alignment due to strong winds. Connector and power supply failures are also common. Coax and power cables installation is costly, time consuming and frequently impossible in older conduits, especially during freezing weather conditions.

ITS Plus’s Power Line Modem uses only a single spare unshielded wire which is present at most signalized intersections. No additional wiring is required. The PLM/VIVDS outputs both NTSC analog and MPEG4 digital video. Coupled with advanced cameras, installation is significantly faster, requires no ongoing maintenance and has demonstrated a near zero hardware field failure during the last 7 years.

Specifications

Camera

- 1/3 inch CCD, color day, B/W at night
- Resolution: 550 lines
- Active Pixel Elements: 768H, 494V
- Rated to 140 mph wind
- NTSC, RS170A, 1Vp-p 75 ohm video
- 0.2 Lux min at night to over 10,000 Lux daytime
- S/N Ratio = 60 dB
- AGC = 30dB
- Automatic Electronic Shutter 1/60 to 1/120,000 sec
- Power Consumption = 1 W
- Operating Temperature: -34C to 60C
- Surge Protection: Over 2,000V
- ISO9001:2000 Certified manufacturing line



Set Up Menu does not block field of view

Power Line Modem Option

- 12 – 24 VDC input
- Power Consumption = 2 W
- Requires only a single spare unshielded wire and common wire for power/communications
- Outputs NTSC Analog video from a BNC coax connector
- Rated to 300 feet; field tested to over 850 feet
- Dynamically adjusts to each intersection's unique impedance and noise environment
- Enables:
 - o Port to piggy back other sensors data (preemption, weather, Homeland Security, etc)
 - o Advanced camera functions, digital cameras, IR cameras
 - o Electronic Camera Stabilization
 - o Other future features
- Meets TS-2 Electrical/Environmental cabinet specs
- ISO9001:2000 Certified manufacturing line

VIVDS Option

- 12 – 24 VDC input
- Power Consumption = 1.5 W single channel, 2.5 W two channel
- Power Line Modem or Coaxial Cable option
- Single or Two Channel Card; NTSC input(s) via BNC (future PAL)
- Programming via USB mouse and analog video monitor
- NTSC and MPEG4 video selectable output
- Up to 4 independent optically isolated output per camera
- Up to 30 detection zones with flexible logic for mapping to relay outputs
- True presence detection; each zone holds the call while vehicles remain in the zone
- Meets TS-2 Electrical/Environmental cabinet specs
- ISO9001:2000 Certified manufacturing line

ITS Plus products are designed and manufactured in the USA