IVP / VMD Module

Product Description

The unit pictured above is a new generation of Intelligent Video Processing (IVP) modules. The first product is a video motion detector (VMD). It incorporates adaptive signal processing technology to achieve highly sensitive detection in a wide range of operating environments with very low false alarm rates. This technology is especially good at handling noisy video sources such as infrared and light intensified cameras. It also adapts to changes in light or weather that have traditionally caused VMD units to fail by generating a high level of false alarms..Because it works with many types of cameras, it can greatly enhance the effectiveness of video based security systems over an entire twenty-four hour period.

The signal processing routines executed by the onboard Digital Signal Processor (DSP) allow this VMD to rapidly learn (within a ½ a second) what is normal in a scene and then detect significant changes, such as intrusions. Its adaptability means that it works without camera-specific setup or configuration. It is well suited for monitoring outdoor.

The VMD module is shown at its actual size. It is smaller, uses less power, and is more reliable than previous generations of VMD at a reasonable cost. It brings new levels of intelligent processing to video security.

Benefits

- Reduced set-up time
- Low cost solution
- Highest performance
- Easy add in design
- Adapts to any video source
- High density SMD package

IVP / VMD Module

Features

- Very Small Size
- Low Power Consumption
- Very Low EMI
- ESD Protected
- On Screen Display
- Relay Output
- Opto-Isolated Input
- Video Loop-through
- NTSC/PAL/SECAM
- Video Loss Detection
- Remote Serial Reset
- Software Upgrades
- Commercial Temp Range

Technical Specifications

Size	(L)1.6" x (W)1.25" x (T).5"
Potting	Non-conductive epoxy
Number of Channels	One video channel per module
I/O Connector	One 20 pin DIN header PCB mount
Fasteners	Two 2.5x.45mm screws
EMI Abatement	
Radiated	Black Anodized Aluminum Faraday shield
Power Supply	Filtered, onboard regulators
Video Section	
Luma Processing	50 fields/second continuous
Video Standards	NTSC, PAL, SECAM
Video Capture Resolution	720x480 pixels
Video Output	Drives 75 ohm back terminated coax
Digital Processing Section	
DSP	Fixed Point DSP
Memory, EEPROM	EEPROM for software and configuration
Overlay	White over video
Static Information	Channel Number, Time, Date at top or bottom (on/off)
Dynamic Information	Target, Target trajectory, variable intensity overlay
Serial I/O	
Host Format	NRZ serial I/O for user supplied RS232/RS422/RS485 drivers
PTZ Format	NRZ serial I/O to directly drive a PTZ camera (option)
ESD Protection	
Serial I/O	TVS clamped and resistor/capacitor limited to DSP
Video I/O	TVS clamped and resistor limited to video decoder and amp
Digital I/0	TVS Clamped and resistor/capacitor limited to DSP
Reset	External system reset, local power on reset.
Addressing	
Module Address	User set
Power	
+5 VDC	250 mA at +5VDC

*As measured in outdoor test environments. Tests were conducted in outdoor ranges live and in addition we tested this VMD against a tape library made of 16 SVHS tapes (published by Sandia National Laboratories) depicting various outdoor conditions targets and ranges in a variety of environments.