# Vi6316 / Vi6316J

### 16-Channel Automatic Video Compensation (AVC) UTP Receiver Hub

## **Features**

- Employs Vigitron's Automatic Video Compensation (AVC) technology to provide adjustment-free excellent quality video
- Realtime video at distances up to 3,500 ft. (1,060 m) when used with any Vigitron Passive Transceivers, and 6,000 ft. (1,830 m) when used with the Vi6300VT Active Transmitter
- NTSC, PAL and SECAM video formats
- Unsurpassed 70 dB cross talk and noise immunity
- Compatible with qualified UTP Cameras
- Full ground loop immunity and built-in surge protection
- Includes 16 coax jumper cables
- Terminal blocks or RJ-45 connectors for UTP connection
- · A Video Present LED indicator for each channel
- · Limited lifetime warranty

## **Applications**

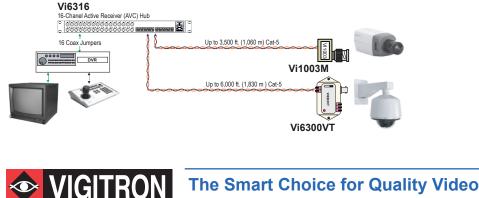
- · Security and surveillance
- · Structured cable environments
- · Casinos, hospitals and airports
- · Long distance alternative to fiber optic

The Vi6316 is an advanced 16 port active receiver hub that features Vigitron's new Automatic Video Compensation (AVC) technology. AVC incorporates a sophisticated microprocessor controlled analog circuit that continuously analyzes incoming video signal and compensates for cable attenuation independent of video signal content. It provides high resolution color or black and white video over unshielded twisted pair wires of Category 2-7, at distances up to 6,000 ft. (1,830 m) when used with the Vigitron Vi6300VT Active Transmitter. It can be used with any Vigitron Passive Transceivers for distances up to 3,500 ft. (1,060 m).

The Vi6316 is a compact 1U 19 in. rack mountable unit. Each channel has an LED to indicate video presence. This receiver hub has built-in surge suppression to protect video equipment against damaging voltage spikes. Its integrated ground loop isolation prevents disturbing "hum-bars" common with long distance installations and its excellent crosstalk and noise immunity provides quality video up to the maximum distance. The Vi6316J provides RJ-45 ports for UTP connectivity to simplify VPD structured cabling system installations.

The Vi6316 innovative design offers exceptional quality video and system flexibility making it ideal for a wide variety of applications that require multiple video channels making it a cost effective alternative to expensive fiber optic solutions.

## **Application Diagram**





www.vigitron.com



# **Technical Specification**

#### **Electrical**

| Video Format    | NTSC, PAL, SECAM   |
|-----------------|--|
| Frequency       | 20 Hz to 6 MHz   |
| Adjustment      | Automatically controlled by internal microprocessor          |
| Coax            | 75 Ohm   |
| Twisted Pair    | 100 Ohms +/- 20%, 24 AWG minimum, unshielded Category 2-7    |
|                 | up to 3,500 ft. (1,060 m) with Vigitron Passive Transceivers |
|                 | up to 6,000 ft. (1,830 m) with Vi6300VT Acive Transmitter    |
| CMRR            | 70 dB  |
| Video Present   | 16 green LEDs, one per channel                               |
| Power           | 110 VAC / 125 mA, 240 VAC / 70 mA                            |
|                 | 15 Watts, 50 BTU / hour                                      |
| Power Indicator | Red LEDs   |
| Connectors      | UTP inputs: Vi6316: Detachable terminal blocks               |
|                 | Vi6316J: RJ-45 connectors                                    |
|                 | Video outputs: 2 BNC outputs for each input                  |
|                 |  |

Power: IEC380 AC power inlet Transient Immunity per ANSI / IEEE 587 C62.41

#### Environmental

Humidity Temperature 0 to 95%, non-condensing Operating: -10°C to +50°C Storage: -30°C to +70°C

#### **Mechanical**

Dimensions Weight Material 1.7x17.0x8.0 in, 4.3x43x20.3 cm (HxWxL) 2.5 lb, 1150 g Aluminum sheet metal

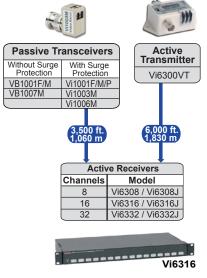
#### **Included Accessories**

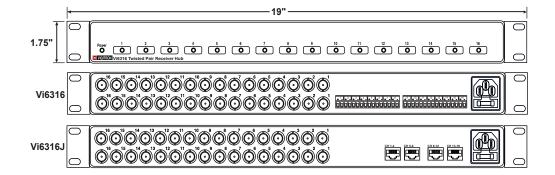
Mounting brackets for front, rear, or wall installations Rubber feet for desk applications 32 2-ft. (60 cm) coax jumper cabless Moulded IEC 7-ft. (200 cm) power cord \*Specifications are subject to change without notice.

#### **Ordering Information**

|   | PART No. | Description                           |
|---|----------|---------------------------------------|
|   | Vi6308   | 8-Ch AVC Active Receiver Hub          |
|   | Vi6316   | 16-Ch AVC Active Receiver Hub         |
| 7 | Vi6332   | 32-Ch AVC Active Receiver Hub         |
|   | Vi6308J  | 8-Ch AVC Active Receiver Hub w/RJ-45  |
|   | Vi6316J  | 16-Ch AVC Active Receiver Hub w/RJ-45 |
|   | Vi6332J  | 32-Ch AVC Active Receiver Hub w/RJ-45 |

## System Configuration





### Wire and Cable Recommendations

The Vigitron products are designed to be used with unshielded twisted pair (UTP) wiring. The UTP wire must be 24AWG - 12AWG or Category 2-7 cable. Multi pair cable with an overall shield is acceptable, however individually shielded pairs should be avoided. Multiple UTP video feeds can be operated in the same communication cable along with telephone, computer, control signals and low power voltages. While UTP video may be routed through punch-down block terminals, any resistive, capacitive or inductive devices (such as T-taps or MOV's) must not be used. Please contact Vigitron for more specific information regarding wire types and proper installation techniques.

