

PRODUCT SPECIFICATION

DOCUMENT NUMBER VH8/16/3256	MODEL VH851, VH1651 & VH3251 8, 16 & 32 Port Active UTP Video Hubs; up to 1,500 feet (457 meters) w/passive transceivers
REVISION NUMBER 041806	VH856, VH1656 & VH3256 8, 16 & 32 Port Active UTP Video Hubs; up to 3,000 feet (914 meters) w/passive transceivers up to 6,000 feet (1,828 meters) w/active transmitters

Description

8, 16 or 32 port active video hubs with built-in surge suppression, ground loop isolation, gain and loss control, and video detection. Systems operate with other Nitek UTP video equipment including, video transceiver hubs, standard video balun transceivers, active transmitters, or any twisted pair equipped camera.

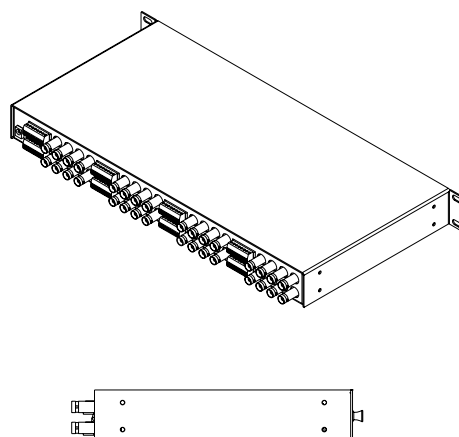
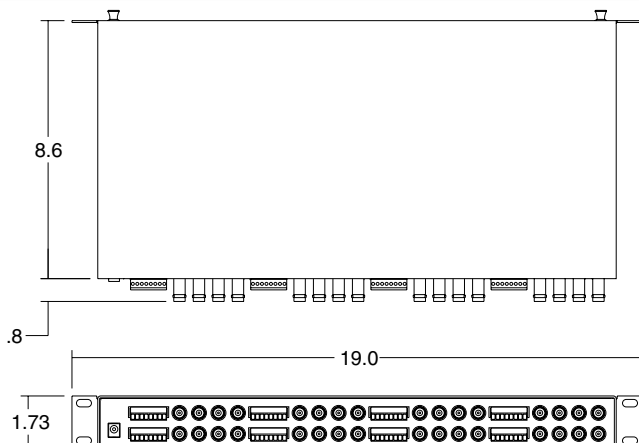
These active video hubs are multi-channel video receiver devices that provide a low cost means of receiving quality live video over Category UTP cabling. The systems can also adapt to existing communication and computer network spare pairs, or new cable installations. The VH851, VH1651 or VH3251 can receive video up to 1,500 feet (457 meters) when used with passive transmitters. The VH856, VH1656 or VH3256 can be used on video runs up to 3,000 feet (914 meters) when used with passive transmitters, or distances of up to 6,000 feet (1,828 meters) with the Nitek TT560 active transmitter. These hubs provide superior immunity from noise and interference, even when run in common raceways with AC.

Features

- Quality video over ordinary twisted pair cable
- Built-in surge suppression
- Built-in ground loop isolation
- Convenient access to DIP switches for accurate gain and loss control
- High immunity to noise and interference
- LED's to indicate video detection
- Highly compact, only one rack unit in height
- Video can be run in the same cable with telephone, computer signals and power



32 Channel Hub shown



NITEK®

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VH851 VH1651 VH3251 VH856 VH1656 VH3256

TECHNICAL SPECIFICATION

8 Port, 16 Port or 32 Port Active UTP Video Hubs

Size **VH851, VH1651, VH856 & VH1656**

1 RU x 6.0"D

VH3251 & VH3256

1 RU x 8.6"D

Power Requirements 24 VAC
(Wall transformer provided with unit)

Video Input Balanced low voltage current loop

Video Output 1 Vpp composite video
Monochrome or Color

Common Mode Rejection >70dB

Video Format RS170, NTSC, PAL, SECAM,
CCIR (Color or B/W)

Twisted Pair Connection Screw terminals providing
balanced low voltage current loop

Wire Spec 26 to 12 AWG unshielded
twisted pair (UTP)

DC Loop Resistance 51 Ohms/1,000 feet
(304 meters) (max)

Nominal Capacitance 17pF/ft.
Impedance 100 Ohms +/- 20%
UTP Category 2 or better

Operating Frequency DC to 10 MHz

Recommended **VH851, VH1651 & VH3251**
Transmission - Up to 1,500 feet (457 meters)
Distance w/Passive Baluns
VH856, VH1656 & VH3256
- Up to 3,000 feet (914 meters)
w/Passive Baluns
- Up to 6,000 feet (1,828 meters)
w/Active Transmitters

Transient Immunity Built-In

Temperature Range -20 degrees C to +55 degrees C

Humidity Range 0 to 98% non-condensing

Enclosure Type Standard 19" rack 1 RU in height

Ordering Information

PART	DESCRIPTION
VH851	8 Port Active UTP Receiver Hub w/surge suppression; up to 1,500 feet (457 meters)
VH1651	16 Port Active UTP Receiver Hub w/surge suppression; up to 1,500 feet (457 meters)
VH3251	32 Port Active UTP Receiver Hub w/surge suppression; up to 1,500 feet (457 meters)
VH856	8 Port Active UTP Receiver Hub w/surge suppression; up to 3,000 feet (914 meters)
VH1656	16 Port Active UTP Receiver Hub w/surge suppression; up to 3,000 feet (914 meters)
VH3256	32 Port Active UTP Receiver Hub w/surge suppression; up to 3,000 feet (914 meters)
<i>The following Nitek equipment works with the above:</i>	
VB37M	BNC Male Video Balun; up to 750 feet (228 meters)
VB37F	BNC Female Video Balun; up to 750 feet (228 meters)
VB39M	BNC Male Video Balun w/surge suppression; up to 750 feet (228 meters)
VB39F	BNC Female Video Balun w/surge suppression; up to 750 feet (228 meters)
VB41x4	4 Balun card w/surge suppression for Rack; up to 750 feet (228 meters)
VH439	4 Port UTP Video Balun Mini-Hub w/surge suppression; up to 750 feet (228 meters)
VH839	8 Port UTP Video Balun Hub w/surge suppression; up to 750 feet (228 meters)
VH1639	16 Port UTP Video Balun Hub w/surge suppression; up to 750 feet (228 meters)
TT560	Active Transmitter w/surge suppression; up to 6,000 feet (1,828 meters)

Wire and Cable Recommendations

Twisted Sender is recommended for use with **unshielded twisted pair** (UTP) wiring. The systems will operate over wire gauges from 26 AWG through 12 AWG but are optimized for 24 AWG. Category cabling may be used. Individually shielded pairs should be avoided as they drastically reduce the operating range of the systems. Multi-pair cable with an overall shield is acceptable. Video can be operated in the same communication cable coexistent with telephone, computer, control signals, power voltages and other video signals. While video may be routed through telephone punchdown block terminals, any bridge-taps, also called T-taps and any resistive, capacitive or inductive devices **MUST BE** removed from the pair. For more specific information regarding wire types, gauges and proper installation techniques, please call 800-528-4343 for technical assistance. More information is also available on the CCTV System Design Guide Sheet.

