



Quality video over ordinary telephone wire...®

Model NV-813A, NV-1613A & NV-3213A Video Transceiver Hubs



(NV-3213A Front)



(NV-3213A Rear)



Features:

- ▶ Use with the NV-213A/A-M, NV-413A, NV-813A, NV-1613A or NV-3213A as a rack-mountable passive transmitter or receiver at distances up to 1,000ft (300m)
- ▶ Use with the NV-452R, NV-652R, NV-862R, NV-1662R or NV-3262R as a rack-mountable passive transmitter for distances up to 3,000ft (1 km)
- ▶ High-Density 19" 1U high enclosure features 8 ports (NV-813A), 16 ports (NV-1613A) or 32 ports (NV-3213A)
- ▶ Compatible with qualified UTP cameras
- ▶ No power required
- ▶ Built-in transient protection
- ▶ Supports "up-the coax" type control signal up to 1,000ft (300m)
- ▶ Includes 8, 16 or 32 2-foot (60cm) coax jumper cables & rackmount hardware
- ▶ Limited lifetime warranty

The NVT Models NV-813A, NV-1613A and NV-3213A are 8, 16 and 32-port passive transceiver hubs that allow transmission of real-time monochrome or color video over Unshielded Twisted-Pair (UTP) telephone wire. Baseband (composite) signals of any type are supported.

"Up the coax" type signal may be sent over the same wire pair at distances up to 1,000ft (300m).

The unparalleled interference rejection ability of the Model NV-813A, NV-1613A and NV-3213A Hubs allows video signals to co-exist in the same wire bundle as telephone, datacom, or low-voltage power circuits. Perfect for larger CCTV installations where port density and camera number growth are prevalent.

Network Video Technologies
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Technical Specifications

Video

Frequency response	DC to 5 MHz
Attenuation	0.5 dB typ
Common-mode / Differential-mode rejection 15 KHz to 5 MHz	60 dB typ
Impedance	
Coax, female BNC	75 ohms
UTP, Screw Terminal Block	100 ohms

Wire Type

Network Wiring	One Unshielded Twisted Pair 24 - 16 AWG (0.5-1.31mm)
Category Type	2 or better
Impedance	100 ± 20 ohms
DC Loop Resistance (24AWG)	52 ohms per 1,000 ft (18 ohms per 100 m)
Differential Capacitance	19 pF/ft max (62 pF/m max)

Environmental

Temperature	-20 to +75°C
Humidity (non-condensing)	0 to 95%
Transient Immunity	6,000 V 1.2µs x 50 µS per ANSI / IEEE 587 C62.41 B3 3,000 A 8µs x 20 µS when ground screw is bonded to earth-ground

Power

No external power required

Mechanical

Dimensions, excluding brackets and connectors	
Weight	NV-813A 3.8lb (1.7kg) NV-1613A 4.2lb (1.9kg) NV-3213A 6.6lb (3.0kg)
Dimensions	17in wide, 1.7in high, 8.125in deep 43cm wide, 4.5cm high, 20cm deep

Accessories

(included)	
Mounting	Rack mount "L" brackets for front, rear, or wall installations; rubber feet for desk applications
Cables	
NV-813A	Eight 2ft (60cm) coax jumpers and one 7ft (2m) ground wire
NV-1613A	Sixteen 2ft (60cm) coax jumpers and one 7ft (2m) ground wire
NV-3213A	Thirty-two 2ft (60cm) coax jumpers and one 7ft (2m) ground wire

Specifications subject to change without notice.

Product Selection Chart

Distance	Transmitter Model	Ext. Power Required	Receiver Model	Ext. Power Required	Ground Lifting	Transient Protection	P/T/Z Control
0 to 500ft (0 to 150m)	NV-212A Video Transceiver.....No or Qualified OEM Camera†.....Yes	No	NV-212A Video Transceiver.....No	No	No	No, not for inter-building use	Yes
0 to 750ft (0 to 225m)	NV-212A Video Transceiver.....No	No	NV-413A 4-Port Passive Transceiver.....No or NV-813A 8-Port Passive Hub.....No or NV-1613A 16-Port Passive Hub.....No or NV-3213A 32-Port Passive Hub.....No	No	No	No, not for inter-building use	Yes
0 to 1,000ft** (0 to 300m)	NV-213A Video Transceiver.....No or NV-213A-M Video Transceiver.....No or NV-413A 4-Port Transceiver.....No or NV-813A 8-Port Passive Hub.....No or NV-1613A 16-Port Passive Hub.....No or NV-3213A 32-Port Passive Hub.....No or Qualified OEM Camera †	No	NV-213A Video Transceiver.....No or NV-413A 4-Port Passive Transceiver.....No or NV-813A 8-Port Passive Hub.....No or NV-1613A 16-Port Passive Hub.....No or NV-3213A 32-Port Passive Hub.....No	No	No	Built-in	Yes
0 to 3,000ft* (0 to 1km)	NV-213A Video Transceiver.....No or NV-213A-M Video Transceiver.....No or NV-413A 4-Port Transceiver.....No or NV-813A 8-Port Passive Hub.....No or NV-1613A 16-Port Passive Hub.....No or NV-3213A 32-Port Passive Hub.....No or Qualified OEM Camera †	No	NV-452R 4-Port Active Receiver.....24V AC/DC or NV-652R Video Active Receiver.....12-24V AC/DC or NV-862R 8-Port Active Rcvr. Hub.....115/230 VAC or NV-1662R 16-Port Active Rcvr. Hub.....115/230 VAC or NV-3262R 32-Port Active Rcvr. Hub.....115/230 VAC	Yes	Yes	Built-in	No, Use RS-422 or RS-485
Cat. 2 or 3* 0 to 1 mile 0 to 5,280ft (0 to 1.6km) or NTSC Cat. 5* 0 to 1.5 miles 0 to 8,000ft (0 to 2.4km)	NV-653T Video Transmitter...24V AC/DC	No	NV-452R 4-Port Active Receiver.....24V AC/DC or NV-652R Video Receiver.....12-24V AC/DC or NV-862R 8-Port Active Rcvr. Hub.....115/230 VAC or NV-1662R 16-Port Active Rcvr. Hub.....115/230 VAC or NV-3262R 32-Port Active Rcvr. Hub.....115/230 VAC	Yes	Yes	Built-in	No, Use RS-422 or RS-485

* Video signals traveling in opposite directions may co-exist in the same wire bundle up to 1,000ft (300m) or 2,000ft (600m) if Cat-5 wire is used

** For Digital Recording applications, it is recommended that Passive to Passive transmission (Example: NV-213A to NV-213A) distances be limited to no more than 750 ft. For distances greater than 750 ft, please use an NVT Active Receiver product.

† The following companies have products which have an integrated NVT UTP/CCTV output module: Ademco Video, CBC, Extreme CCTV, Kalatel, Silent Witness, Ultrak, Vicon, Videolarm. These cameras, therefore, have what is equivalent to the NV-213A built into the camera. When used with NVT active receiver models, transmission distances up to 3,000ft or (1km) are possible.

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