

### Video Balun Card for Twisted Pair

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#### Description

The **VB41x8** modular card is designed for use with the modular rack system. Each card has 8 video balun units, built-in surge suppression and video loss detection.

The Nitek video baluns are transmission devices that provide a low cost means for sending live video over unshielded twisted pair, point-to-point wiring for distances up to 750 feet. The Nitek video baluns are also compatible with all of the “up-the-coax” control systems. A basic system would require one unit at each end of a twisted pair of wires. The Nitek video baluns are intended for use over existing in-house telephone wiring, Category wiring or other twisted pair cable runs to provide a convenient, cost-effective alternative to coax. Nitek video baluns are designed to provide immunity from noise and interference, even when run next to line power!

The VB41x8 plugs into the VH3200 card cage, which holds up to four (4) modular cards. This modular “plug-in” feature allows the system to be custom configured for each application and provides easy expandability.

#### Features

- Quality video over ordinary twisted pair cable
- Built-in surge suppression
- Immunity to noise and interference
- Built-in video loss detection
- Video & P/T/Z over a single pair (with “up-the-coax” systems)
- RJ45 or push terminals for easy connection

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#### USA OFFICE:

729 1ST AVE N. BIRMINGHAM, AL 35203

PHONE : (847) 259-8900

E-MAIL: [INFO@NITEK.NET](mailto:INFO@NITEK.NET) • [WEB:NITEK.NET](http://WEB:NITEK.NET)

# TECHNICAL SPECIFICATION

## VB41x8 Modular Rack Card

Size	1 card slot
Twisted Pair Input	(8) Balanced low voltage current Loop
Output	(8) 1 vpp composite video Monochrome or color
Common Mode Rejection	60 dB
Video Format	RS170, NTSC, PAL, SECAM, CCIR (Color or B/W)
Operating Frequency	DC to 10 MHz
Wire Spec	26 to 18 AWG twisted pair
DC Loop Resistance	50 Ohms/1,000 ft
Nominal Capacitance	17pF/ft
Impedance	100 Ohms +/- 20%
Category Wire	2 or better
Transient Immunity	Built-in
Shipping Weight	1 lb

## Wire and Cable Recommendations

We recommend using unshielded twisted pair wiring. The systems will operate over wire 26 to 18 AWG but are optimized for 24 AWG. Category cables 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 punch down block terminals, any bridge-taps, also called T-taps and any resistive, capacitive or inductive devices MUST BE removed from the pair.