
TECHNICAL SPECIFICATIONS

SECURITY SYSTEM

DIVISION 16 - ELECTRICAL

SECTION 16770 - CLOSED CIRCUIT TELEVISION (CCTV) SYSTEM

PART 2 – PRODUCTS

2.01 GENERAL

- A. All equipment and materials used shall be standard components that are regularly manufactured and utilized in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in actual use.
- C. All systems and components shall be provided with the availability of a toll-free (U.S. and Canada) technical support number from the manufacturer. The number shall provide technical assistance for either the dealer/installer or the end user at no charge for as long as the product is installed.

2.02 UNSHIELDED TWISTED-PAIR VIDEO TRANSCEIVER HUB, 16-PORT PASSIVE

- A. The 16-Port Passive Video Transceiver Hub device shall be capable of transmitting or receiving up to sixteen baseband monochrome or color video signals over unshielded twisted-pair (UTP) telephone wire up to a distance of 750 feet (225 m) without requiring power at either end.
- B. The transmitting device shall accept a baseband video signal, each from a 75-ohm source.
- C. The receiving device shall deliver a baseband video signal, each capable of driving a 75-ohm load.
- D. "Up the Coax" Pan/Tilt/Zoom controls shall be supported.
- E. The transceiver shall have built-in transient protection, with earth-ground screw connection.
- F. Distances up to 3,000 feet (1,000 m) shall be supported when used in conjunction with a NVT DigitalEQ™ Hub or amplified (active) receiver. Distances up to 1,500 feet (460m) shall be supported by any NVT StubEQ™ Hub.
- G. The transceiver shall be equipped with RJ45 video inputs. The transceiver shall be packaged with four RJ45 to Screw Terminal Adaptors for an alternate choice video input termination
- H. The transceiver shall be equipped with female BNC for 75-ohm output connections.
- I. The transceiver shall have the ability to operate in the same wire bundle as telephone, data, low voltage power, or other video signals.
- J. The transceiver shall meet or exceed the following design and performance specifications:
 - a. Have typical common-mode rejection of 60 dB between the frequencies of 15 KHz to 5 MHz.
 - b. The transceiver shall have a frequency response from DC to 5 MHz.
 - c. The transceiver shall have a typical attenuation of 0.5 dB.
 - d. The transceiver shall provide transient immunity as per ANSI/IEEE 587C62.41.

UNSHIELDED TWISTED-PAIR VIDEO TRANSCEIVER HUB, 16-PORT PASSIVE (SCREW
TERMINAL/RJ45 INPUT)

Page 2

- e. The transceiver shall be for indoor use or for use in an environmental enclosure and allow a maximum operating temperature range of –20 to 75 degrees Celsius.
- K. The transceiver shall be capable of utilizing 24-16 AWG (solid or stranded) UTP wire.
- L. The transceiver shall be capable of utilizing Category 2 or better UTP without compromising interference immunity or transmission distances.
- M. The transceiver shall have a weight of 4.30 lbs (1.95 kg).
- N. The receiving device shall have dimensions of 17” wide, 1.7” (1RU) high, 8.125” deep (43 cm x 4.5 cm x 20 cm).
- O. The transceiver shall be packaged with “L” brackets to support the front or rear rail rack mounting, or wall mounting; and rubber feet to support desk mount applications.
- P. The transceiver shall be packaged with sixteen 2-ft (60 cm) coax jumper cables.
- Q. The transceiver shall be UL and CUL listed.
- R. The transceiver shall be CE compliant.
- S. The transceiver shall be provided with a limited lifetime warranty.
- T. The Unshielded Twisted-Pair Video Transceiver Hub, 16-Port Passive shall be the NVT:
 - a. NV-1613 or
 - b. Approved equal