
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 UTP VIDEO TRANSMITTER +12VDC CONVERTER, PASSIVE

- A. The power-video (PV) transmitter device shall be capable of transmitting baseband monochrome or color video signals over unshielded twisted-pair (UTP) telephone wire to a passive transmitter up to a distance of 750 feet (225 m).
- B. 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 when used in conjunction with a StubEQ™ Hub.
- C. The transmitting device shall accept a baseband video signal from a 75-ohm source.
- D. The receiving device shall deliver a baseband video signal capable of driving a 75-ohm load.
- E. "Up the Coax" Pan/Tilt/Zoom controls shall be supported when used with a passive transceiver.
- F. The transmitter shall have built-in video transient protection without the need for a ground connection.
- G. The transmitter shall be equipped with a inline male BNC for 75-ohm camera connection.
- H. The transmitter shall be equipped with a standard 8-pin RJ45 modular jack (female).
- I. The transmitter shall be capable of utilizing 23-26 AWG (solid or stranded) UTP wire with the following EIA/TIA 568B compliant pinouts:
 - Pin 1: Video +
 - Pin 2: Video –
 - Pin 3:
 - Pin 4: Power –
 - Pin 5: Power +
 - Pin 6:
 - Pin 7: Power +

Pin 8: Power –

- J. The transmitter shall have a pair of 16AWG solid power leads to connect camera power.
- K. The transmitter shall convert 24VAC-to-12VAC at up to 400mA.
- L. The transmitter shall route power, and video signals via UTP RJ45.
- M. The transmitter is to be used with Power-Video-Data (PVD) Cable Integrator for organized cable management between control equipment and the wiring closet or IDF or with another power-video-data transmitter device.
- N. The transmitter 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 transmitter shall have a frequency response from DC to 5 MHz.
 - c. The transmitter shall have a typical attenuation of 0.5 dB or better.
 - d. The transmitter shall provide transient immunity as per ANSI/IEEE 587C62.41.
 - e. The transmitter shall be for indoor use or for use in an environmental enclosure and allow a maximum operating temperature range of –20C to 50C.
- O. The transmitter shall be capable of utilizing Category 2 or better UTP without compromising interference immunity or transmission distances.
- P. The transmitter shall have a weight of 1.8oz (50g).
- Q. The transmitter shall have a body height of 2.25in (57mm), body width of 1.52in (39mm) and a body depth (not including connectors) of .81in (20.5mm).
- R. The transmitter shall be UL and cUL listed.
- S. The transmitter shall be CE compliant.
- T. The transmitter shall be RoHs compliant.
- U. The transmitter shall be WEEE compliant.
- V. The transmitter shall be provided with a limited lifetime warranty.
- W. The UTP Video Transmitter +12VDC Converter, Passive, shall be the NVT:
 - a. NV-226J-PV or
 - b. Approved equal