

SINGLE CHANNEL PASSIVE UTP VIDEO TRANSCEIVER

GEC-1PVTC-F, GEC-PVTC-M, GEC-PVTC-MC, GEC-PVTC-MRTSP,  
GEC-PVTC-MCSP, GEC-PVTC-FCSP, GEC-PVTC-MSP

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SECURITY SYSTEM

28 23 00 VIDEO SURVEILLANCE

PART 2 - PRODUCTS

2.01 GENERAL

- A. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in actual use.

2.02 SINGLE CHANNEL PASSIVE UTP VIDEO TRANSCEIVER

- A. The Single Channel UTP Passive Video Transceiver shall be capable of transmitting and receiving baseband monochrome or color video signals over unshielded twisted-pair (UTP) telephone wire to a passive transceiver up to a distance of 750 feet (230 m) without requiring power
- B. Shall be compatible with NTSC, PAL and SECAM color video standards.
- C. If used as a Transmitter, Distances up to 3,000 feet (915 m) shall be supported when used in conjunction with an approved active receiver, and support a minimum of 500 lines of video resolution.
- D. If used as a Transmitter, the device shall accept a baseband video signal, each from a 75-ohm source.
- E. If used as a Receiver, the device shall produce a baseband video signal capable of driving a 75-ohm load.
- F. Shall support bi-directional signal transmission via the Vertical Interval of the video signal shall be supported up to 750 feet (230 m) when using this transceiver to transmit the signal to another passive receiver, so long as all other requirements are met. These signals are typically known as "Up the Coax" control, used to facilitate Pan/Tilt/Zoom functionality with the appropriate and compatible PTZ hardware.
- G. The transceiver may have built-in differential transient protection without the need for a ground connection.
- H. The transceiver shall be equipped with a corrosion-resistant terminal or rapid connector for connection to UTP wire.
- I. The transceiver housing shall be equipped with an integrated male BNC, female BNC, or an 8-foot coax jumper male BNC for 75-ohm camera connection.
- J. The transceiver shall interlock directly to the BNC receptacle, without requiring additional mounting hardware
- K. The transceiver shall deliver signals operating in the same cable bundle as telephone, data, low voltage or other video signals, without interference.

L. The Single Channel Passive UTP Video Transceiver

1. The transceiver housing shall be equipped with an integrated male or female BNC connector for 75-ohm camera connection for each channel.
2. The transceiver shall be equipped with corrosion-resistant screw-less connector for connection to UTP wire.

M. The Single Channel Passive UTP Video Transceiver with Coax BNC Connector

1. The transceiver shall be equipped with an integrated male BNC for 75-ohm camera connection. There shall be 8 inch or more in length mini-coax cable between the BNC and the transceiver body.
2. The transceiver shall be equipped with corrosion-resistant terminal connector for connection to UTP wire.

N. The Single Channel Passive UTP Video Transceiver with Surge Protection

1. The transceiver housing shall be equipped with an integrated male or female BNC connector for 75-ohm camera connection for each channel.
2. The transceiver shall be equipped with corrosion-resistant terminal connector for connection to UTP wire.
3. The transceiver shall have built-in differential transient protection without the need for a ground connection.
4. The transceiver shall have built-in common transient protection with a ground connection.

O. The Single Channel Passive UTP Video Transceiver with Surge Protection and Coax BNC Connector

1. The transceiver shall be equipped with an integrated male BNC for 75-ohm camera connection. There shall be 8 inch or more in length mini-coax cable between the BNC and the transceiver body.
2. The transceiver shall be equipped with corrosion-resistant terminal connector for connection to UTP wire.
3. The transceiver shall have built-in differential transient protection without the need for a ground connection.

P. The Single Channel Right Angle Passive UTP Video Transceiver with Surge Protection

1. The transceiver housing shall be equipped with an integrated right angle male BNC connector for 75-ohm camera connection for each channel.
2. The transceiver shall be equipped with corrosion-resistant screw-less connector for connection to UTP wire.
3. The transceiver shall have built-in differential transient protection without the need for a ground connection.

2.03 ELECTRICAL SPECIFICATIONS - Single Channel Passive UTP Video Transceiver

- A. Video Output Voltage: 0.6 to 1.6 Vp-p
- B. Insertion Loss: .3 dB
- C. Common-mode rejection: 60 dB
- D. Color Video standard: NTSC, PAL and SECAM
- E. Frequency Response: 0 to 5Mhz depending on configuration
- F. Video Connector: Screw-less UTP, 100 ohm, integrated
- G. Camera Connector: Male or Female BNC, 75 ohm, integrated
- H. Transmission Wiring: Category 2 or better UTP

2.04 ELECTRICAL SPECIFICATIONS - Single Channel Passive UTP Video Transceiver with Coax BNC Connector

- A. Video Output Voltage: 0.6 to 1.6 Vp-p
- B. Insertion Loss: .3 dB
- C. Common-mode rejection: 60 dB
- D. Color Video standard: NTSC, PAL and SECAM
- E. Frequency Response: 0 to 5Mhz depending on configuration
- F. Transient Immunity: ANSI / IEEE 587 C62.41
- G. Video Connector: Screw-less UTP, 100 ohm, integrated
- H. Camera Connector: Male BNC, 75 ohm, 8-inch mini-coax
- I. Transmission Wiring: Category 2 or better UTP

2.05 ELECTRICAL SPECIFICATIONS - Single Channel Passive UTP Video Transceiver with Surge Protection

- A. Video Output Voltage: 0.6 to 1.6 Vp-p
- B. Insertion Loss: .3 dB
- C. Common-mode rejection: 60 dB
- D. Color Video standard: NTSC, PAL and SECAM
- E. Frequency Response: 0 to 5Mhz depending on configuration
- F. Transient Immunity: ANSI / IEEE 587 C62.41
- G. Video Connector: Screw-less UTP, 100 ohm, integrated
- H. Camera Connector: Male or Female BNC, 75 ohm, integrated
- I. Transmission Wiring: Category 2 or better UTP

2.06 ELECTRICAL SPECIFICATIONS - Single Channel Passive UTP Video Transceiver with Surge Protection and Coax BNC Connector

- J. Video Output Voltage: 0.6 to 1.6 Vp-p
- K. Insertion Loss: .3 dB
- L. Common-mode rejection: 60 dB
- M. Color Video standard: NTSC, PAL and SECAM
- N. Frequency Response: 0 to 5Mhz depending on configuration
- O. Transient Immunity: ANSI / IEEE 587 C62.41
- P. Video Connector: Screw-less UTP, 100 ohm, integrated
- Q. Camera Connector: Male BNC, 75 ohm, 8-inch mini-coax
- R. Transmission Wiring: Category 2 or better UTP

2.07 ELECTRICAL SPECIFICATIONS - Single Channel Right Angle Passive UTP Video Transceiver with Surge Protection

- A. Video Output Voltage: 0.6 to 1.6 Vp-p
- B. Insertion Loss: .3 dB
- C. Common-mode rejection: 60 dB
- D. Color Video standard: NTSC, PAL and SECAM
- E. Frequency Response: 0 to 5Mhz depending on configuration
- F. Transient Immunity: ANSI / IEEE 587 C62.41
- G. Video Connector: Screw-less UTP, 100 ohm, integrated
- H. Camera Connector: Male BNC, 75 ohm, integrated right angle
- I. Transmission Wiring: Category 2 or better UTP

2.08 ENVIRONMENTAL SPECIFICATIONS

- A. Storage Temperature: -22° to 158°F (-30° to 70°C)
- B. Operating Temperature: 16° to 122°F (-10° to 50°C)
- C. Operating Humidity Range: 0 to 95%, non-condensing

2.09 MECHANICAL SPECIFICATIONS - Single Channel Passive UTP Video Transceiver

- A. Height .60 in (1.5 cm)
- B. Width **.63 in (1.6 cm)**
- C. Depth **1.82 in. (4.7 cm)**
- D. Weight **.04 lb (18 g)**
- E. Material Grey ABS plastic, UL rating of 94V-0

2.10 MECHANICAL SPECIFICATIONS - Single Channel Passive UTP Video Transceiver with Coax BNC Connector

- A. Height .54 in. (1.4 cm)
- B. Width .54 in. (1.4 cm)
- C. Length 1.85 in. (4.7 cm) excluding coax cable
- D. Weight .06 lb (26 g)
- E. Material Grey ABS plastic, UL rating of 94V-0

2.11 MECHANICAL SPECIFICATIONS - Single Channel Passive UTP Video Transceiver with Surge Protection

- A. Height .54 in. (1.4 cm)
- B. Width .54 in. (1.4 cm)
- C. Depth 1.85 in. (4.7 cm)
- D. Weight .04 lb (18 g)
- E. Material Grey ABS plastic, UL rating of 94V-0

2.12 MECHANICAL SPECIFICATIONS - Single Channel Passive UTP Video Transceiver with Surge Protection and Coax BNC Connector

- A. Height .54 in. (1.4 cm)
- B. Width .54 in. (1.4 cm)
- C. Length 1.85 in. (4.7 cm) excluding coax cable
- D. Weight .06 lb (26 g)
- E. Material Grey ABS plastic, UL rating of 94V-0

#### 2.13 MECHANICAL SPECIFICATIONS - Single Channel Right Angle Passive UTP Video Transceiver with Surge Protection

- A. Height .55 in. (1.4 cm)
- B. Width .94 in. (2.4 cm)
- C. Length 1.26 in. (3.2 cm)
- D. Weight .04 lb (18 g)
- E. Material Grey ABS plastic, UL rating of 94V-0

#### 2.14 CERTIFICATIONS

- A. UL/cUL - FCC Part 15, Class A minimum, cUL 60950-1
- B. RoHS
- C. WEEE

#### 2.15 WARRANTY

- A. Limited lifetime

#### 2.16 ACCEPTED MANUFACTURER

- A. GE Security, Inc. 8985 Town Center Parkway, Bradenton, FL 34202-5129
- B. Phone 1-888-437-3287
- C. Email: gesecurity.customerservice@ge.com
- D. Substitutions: Not Permitted
- E. The unshielded twisted-pair passive single-channel video transceiver shall be GE Models GEC-1PVTC-F, GEC-PVTC-M, GEC-PVTC-MC, GEC-PVTC-MRTSP, GEC-PVTC-MCSP, GEC-PVTC-FCSP, GEC-PVTC-MSP.

END OF SECTION

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