

**MULTICHANNEL ACTIVE UTP RECEIVER HUB WITH
AUTOMATIC VIDEO COMPENSATION**

GEC-4VARHUB-4, GEC-8VARHUB-4, GEC-16VARHUB-4, GEC-32VARHUB-4,
GEC-8VARHUB-6.5, GEC-16VARHUB-6.5, GEC-32VARHUB-6.5

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 MULTICHANNEL ACTIVE UTP VIDEO RECEIVER HUB

- A. The long-range multichannel Active UTP Video Receiver Hub shall be capable of receiving baseband monochrome or color video signals over unshielded twisted-pair (UTP) telephone wire from a passive transceiver up to a distance of 3,500 feet (1,060 m). Distances up to 6,000 feet (1,830 m) shall be supported when used in conjunction with an amplified (active) transmitter for NTSC & PAL video signals using Category 5 cable.
- B. The mid-range multichannel UTP Active Receiver Hub shall be capable of receiving baseband monochrome or color video signals over unshielded twisted-pair (UTP) telephone wire from a passive transceiver up to a distance of 2,000 feet (610 m). Distances up to 4,000 feet (1,220 m) shall be supported when used in conjunction with an amplified (active) transmitter for NTSC & PAL video signals using Category 5 cable.
- C. The multichannel active receiver hub shall have fully automatic (no adjustment) digital video compensation for each port, within distance specified for NTSC and PAL standards. The receiver shall continuously analyze incoming video signal and automatically compensate for cable attenuation independent of video signal content.
- D. The 8 channel active receiver hub shall have an integrated Video Distribution Amplifier, with four BNC outputs per channel. The 16 channel active receiver hub shall have an integrated Video Distribution Amplifier, with two BNC outputs per channel.
- E. The receiving device shall deliver a baseband video signal capable of driving a 75-ohm load.
- F. The multichannel active receiver hub shall have integrated differential transient protection without the need for a ground connection. Additionally, the receiving device shall have integrated common mode transient protection, which to be functional, requires an electrical ground connection via screw terminal to protect video equipment against damaging voltage spikes.
- G. The multichannel active receiver hub shall be equipped with corrosion-resistant detachable terminal blocks for connection to UTP wire. The multichannel active receiver hub shall be packed with attachable RJ-45 adaptors as an alternate choice for UTP connection.
- H. The multichannel active receiver hub's attachable RJ-45 adapters shall comply with standard structured cabling pin-outs of RJ-45 per EIA/TIA 568B.

- I. The multichannel active receiver hub shall have a Red "Power-On" LED.
- J. The multichannel active receiver hub shall have a Green "Video Present" LED for each channel to indicate accurate reception of minimum sync level for stable video signals.
- K. The multichannel active receiver hub shall have built-in ground lifting.
- L. The multichannel active receiver hub shall deliver signals operating in the same cable bundle as telephone, data, low voltage or other video signals, without interference.

2.03 ELECTRICAL SPECIFICATIONS - 4 Channel Active Receiver

- A. Input Power Voltage: 12-24V AC/DC, 400 mA
- B. Video Output Voltage: 0.6 to 1.6 Vp-p
- C. Common-mode rejection: 70 dB. 15 KHz-5 MHz.
- 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 Input Connector: Terminal block or RJ-45 adapter, 100 ohm
- H. Video Output Connector: BNC, 75 ohm
- I. Transmission Wiring: Category 2 or better UTP
- J. Features: Automatic video compensation, group loop lifting, surge protection

2.04 ELECTRICAL SPECIFICATIONS – 8, 16 and 32 Channel Active Receiver

- A. Input Power Voltage: 110-240 Volts AC
- B. Video Output Voltage: 0.6 to 1.6 Vp-p
- C. Common-mode rejection: 70 dB. 15 KHz-5 MHz.
- 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 Input Connector: Terminal block or RJ-45 adapter, 100 ohm
- H. Video Output Connector: BNC, 75 ohm
- I. Transmission Wiring: Category 2 or better UTP
- J. Features: Automatic video compensation, group loop lifting, surge

2.05 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

2.06 MECHANICAL SPECIFICATIONS- 4 Channel Active Receiver

- A. Height 1.74 in. (4.2 cm)
- B. Width 4.97 in (12.6 cm), 6.77 in (17.2 cm) include integrated rackmounts**
- C. Depth 1.77 in (4.5 cm)**
- D. Weight .31 lb (142 g)**
- E. Material Extruded aluminum

2.07 MECHANICAL SPECIFICATIONS - 8, 16 and 32 Channel Active Receiver

- A. Height 1.7 in. (4.3 cm)
- B. Width 17 in. (43 cm)
- C. Depth 8 in. (20.3 cm)
- D. Weight 8 ch – 4.5 lb (2.04kg), 16 ch – 4.6 lb (2.09kg), 32 ch – 5.6 lb (2.54 kg)
- E. Material Aluminum sheet metal

2.08 INCLUDED ACCESSORIES - 8, 16 and 32 Channel Active Receiver

- A. Mounting brackets for front, rear or wall installations
- B. A 2-ft. (60 cm) coax jumper cable for each channel
- C. Molded IEC 7-ft. (200 cm) power cord
- D. Rubber feet to support desktop mount

2.09 OPTIONAL ACCESSORIES - 4 Channel Active Receiver

- A. 19-inch Rack panel kit to support up to two 4-channel receiver hubs.

2.10 CERTIFICATIONS

- A. CE - EN 55022:2006, Class A minimum, EN 61000-3-2:2006, EN 61000-3-3+A2:2005, EN 50130-4+A2:2003, IEC/EN 60950-1
- B. UL/cUL - FCC Part 15, Class A minimum, cUL 60950-1
- C. RoHS
- D. WEEE

2.11 WARRANTY

- A. Limited lifetime

2.12 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 active multi-channel video receiver shall be GE Models GEC-4VARHUB-4, GEC-8VARHUB-4, GEC-16VARHUB-4, GEC-32VARHUB-4, GEC-8VARHUB-6.5, GEC-16VARHUB-6.5, GEC-32VARHUB-6.5

END OF SECTION

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