

## Architectural and Engineering Specifications

### GV-PTZ010D 10x Optical Zoom D1 H.264 PTZ IP Camera

Revision Date: 11/09/2010



#### A. General Requirements

1. The GV-PTZ010D shall be a dual-stream, day/night, network camera utilizing a CCD imager with a 1/4-inch optical format.
2. The GV-PTZ010D shall offer two models: GV-PTZ010D-N for NTSC and GV-PTZ010D-P for PAL.
3. The GV-PTZ010D shall utilize H.264, MPEG4 and MJPEG video compression methods with resolutions up to 704 x 480 (NTSC) or 704 x 576 (PAL).
4. The maximum frame rate capacity shall be up to 30 frames per second for NTSC and 25 frames per second for PAL.
5. A built-in Web server shall be incorporated that allows users to view the camera view using Microsoft Internet Explorer (version 7.0 or higher required) without the need for special viewer software.
6. Up to seven (7) connections shall be supported simultaneously over the network. When one (1) GV-System connects to one (1) GV-PTZ010D, it takes two (2) connections. When users connect to one (1) GV-PTZ010D via browser, it takes one (1) connection. When users operate the Camera/Audio Control on Center V2 to connect the GV-PTZ010D, it takes one (1) connection.

7. The GV-PTZ010D shall provide administrator and guest level settings on the Web interface. The administrator account shall have full access to all functions, and the guest account shall have access to camera live video and network status information only.
8. The panning, tilting and zooming features shall be accessible through the Web interface.
9. The speed of panning, tilting and zooming shall be adjustable.
10. The GV-PTZ010D shall be capable of storing up to 256 preset points. A preset point shall be a configured point in live view toward which the camera moves upon command or input trigger.
11. The GV-PTZ010D shall be capable of storing up to 8 sequences. A sequence shall contain up to 32 preset points that the camera moves toward consecutively in live view.

#### B. Alarm and Notification Requirements

1. The GV-PTZ010D shall be capable of motion detection.
2. A privacy mask function shall be provided to allow users to specify areas of the image to be blocked off on the camera view for privacy purpose.
3. The GV-PTZ010D shall be capable of triggering an output device or sending E-Mail alert when recording errors occur and when hard disks become full.
4. The GV-PTZ010D shall have E-mail and FTP ability for alert notification.

#### C. Recording and Playback Requirements

1. The GV-PTZ010D shall be capable of recording by schedule, upon input trigger, and upon motion detection.
2. The GV-PTZ010D shall be capable of storing recorded data on the inserted micro SD/SDHC memory card, an FTP server or GV-Systems.
3. Pre-recording and post-recording functions shall be available.
4. Users shall be able to play back recorded data on a GV-System or over network.

#### D. Video Requirements

1. For flexible bandwidth management, the GV-PTZ010D shall support constant bitrate (CBR) and variable bitrate (VBR). For variable bitrate (VBR), the maximal bit rate shall be selectable to restrict the system from exceeding a specified bit rate.
2. The GV-PTZ010D shall support manual and automatic shutter control. The GV-PTZ010D-N shall have an automatic shutter with a speed range of 1/60 ~ 1/120,000 seconds; the GV-PTZ010D-P shall have an automatic shutter with a speed range of 1/50 ~ 1/120,000 sec.
3. The GV-PTZ010D shall support manual and automatic Light Control (ALC).
4. The GV-PTZ010D shall be equipped with manual white balance (ATW and AWB) in the range of 3200K to 9600K.
5. The GV-PTZ010D shall support red (R Gain) and blue (B Gain) color adjustment.
6. The GV-PTZ010D shall support Automatic Gain Control (AGC), Background Light Compensation (BLC), Aperture Compensation (APC), and Gamma.
7. The GV-PTZ010D shall support the following resolutions:

Stream	Resolution	
<b>Main</b>	<b>NTSC</b>	704 x 480
		704 x 240
		352 x 240
	<b>PAL</b>	704 x 576
704 x 288		
352 x 288		
<b>Sub</b>	<b>NTSC</b>	704 x 480
		704 x 240
		352 x 240
	<b>PAL</b>	704 x 576
704 x 288		
352 x 288		

#### E. Audio Requirements

1. The GV-PTZ010D shall support audio codec G.711.
2. The GV-PTZ010D shall be equipped with a built-in microphone.
3. The GV-PTZ010D shall support bi-directional audio transmission.
4. The GV-PTZ010D shall be equipped with connectors to support an external microphone and speaker.

#### F. Networking Requirements

1. Network interface shall be via an Ethernet (10/100 Base-T), RJ-45 connector.
2. The GV-PTZ010D shall be accessible using Microsoft Internet Explorer 6.0 or higher.
3. DDNS function shall be available.
4. The GV-PTZ010D shall support the following network protocols: HTTP, TCP, UDP, SMTP, FTP, DHCP, NTP, UPnP, DynDNS, 3GPP/ISMA, RTSP and PSIA.
5. Users shall be able to configure port settings.
6. The GV-PTZ010D shall be capable of restricting access to camera by IP filtering.

#### G. Lens Requirements

1. The GV-PTZ010D shall have a fixed iris lens with a focal length of 4.2 mm ~ 42 mm.
2. The aperture of the GV-PTZ010D shall be F/1.8 ~ F/2.9.
3. The GV-PTZ010D shall be equipped with 10x Optical Zoom and 10x Digital Zoom.
4. The GV-PTZ010D shall have the following angle of view: Diagonal 56.4°, horizontal 46.4°, vertical 35.6°.
5. The GV-PTZ010D shall require a minimum illumination of 2.5 lux in color mode and 0.07 lux in B/W mode, both at 50 IRE, F/1.8.

#### H. Mechanical Requirements

1. The GV-PTZ010D shall be ceiling and wall mountable.
2. The GV-PTZ010D shall be equipped with connectors for 1 digital input and 1 digital output.

3. The GV-PTZ010D shall have a dimension of 167.75 x 166.78 x 135.2 (mm) / 6.6 x 6.57 x 5.32 (in) with mounting cover and 124.55 x 122.73 x 133.3 (mm) / 4.9 x 4.83 x 5.25 (in) without mounting cover.
  4. The GV-PTZ010D shall have a weight of 490g / 1.08lb.
  5. The GV-PTZ010D shall support a panning range of -175° to 175° and tilting range of -45° to 90°.
  6. The GV-PTZ010D shall have a built-in temperature detector to detect the chipset temperature inside the camera.
- I. Power Requirements
1. Power shall be connected using the supplied power adapter or the Power over Ethernet (PoE).
  2. The GV-PTZ010D shall be capable of receiving power from 12V DC, 24V AC, and IEEE802.3af Power over Ethernet (PoE).
  3. The power consumption of GV-PTZ010D shall be 15 W (max. 1.25A at 12V DC).
- J. Environmental Requirements
1. The operating temperature shall be within the range of -10°C - 50°C / 14 °F - 122 °F
  2. The humidity shall be within the range of 10% to 90% with no condensation.
- K. System Requirements
1. Supported operating systems shall include Windows XP, Windows Vista, Windows 7 and Windows Server 2008.
  2. Microsoft Internet Explorer version 6.0 or higher is required to access Web interface.
- L. Packing List shall include:
1. Software CD containing *GV-IPCam H.264 User's Manual* and setup program
  2. GV-PTZ / PT Quick Start Guide
  3. GV-NVR Software DVD
  4. GV-NVR Quick Start Guide
  5. DC 12V Power Adapter
  6. Mounting cover

7. Mounting base
8. Wall mount bracket
9. Screw anchors
10. Long screws
11. Short screws

M. Certifications and Approvals

1. CE, FCC, CTick, RoHS compliant