

# Internet Camera





— DCS-2100G

# **Wireless Internet Camera**

# For Home & Small Office

The DCS-2100G Wireless Internet Camera is a security system for home and small office use. This camera connects to an Ethernet and wireless network, and to the broadband Internet. Designed for image and sound monitoring, the camera also provides advanced software functions for multi-camera monitoring and management, and is a comprehensive but affordable system for surveillance from a local or remote site through the web.

## Stand-alone System With Integrated Web Server

The DCS-2100G comes with a built-in CPU and web server, providing a low-cost solution for home and small office monitoring needs. Its integrated web server eliminates the need to connect the camera to a computer. Once installed, you use the built-in IP address to gain access to the camera, view live streaming video, and make changes to camera settings.

## Watch and Listen Remotely

Through a built-in microphone, you can watch and listen remotely as the DCS-2100G captures both sound and video of your site. With its own IP address and built-in web server, you can place the DCS-2100G anywhere on the network. Directly connected to a local network or the Internet without going through any computer, this camera easily integrates with your network environment.

# High-Quality Video With Digital Zoom

The DCS-2100G uses MPEG-4 short header mode to stream live video at up to 30 frames per second for real-time viewing. As you watch and listen remotely to video and sound obtained by the DCS-2100G, you can instantly take snapshots directly from the web browser. The DCS-2100G provides enhanced viewing capabilities with its ability to digitally zoom in up to 4 times on specific areas for close-ups. It can also capture video in rooms with minimal lighting, and is ideal for use at night.

## Multi-Camera Monitoring

Surveillance software is included to let you view up to 16 cameras on a single computer screen at one central location. Images can be recorded to your computer's hard drive manually or according to a pre-set schedule. You can set up automated e-mail alerts for sending through the Internet to alarm you instantly of all unusual happenings.

# Key Features

- Stand-alone Internet camera with CPU & RAM, no need to attach to PC
- Local access through Ethernet and built-in 802.11g wireless LAN
- Remote access through Internet
   An digital group for along up viguri
- 4x digital zoom for close-up viewing \*
- Surveillance software to control up to 16 cameras
- Motion detection triggered recording or scheduled recording
- Smart playback

## Motion Detected Recording

Instead of recording 24 hours a day, 7 days a week, images can also be recorded only when motions are detected. This saves disk space and eliminates the time wasted to view unnecessary images. Images can be directly archived straight to your computer hard drive or to a network attached storage. Playback consumes little time with triggered event browsing and fast database searching.

## Wireless and Ethernet Connection

For effective surveillance in and around a building, this camera comes with a built-in high-speed 802.11g wireless network interface, allowing images to be transmitted at up to 54Mbps wireless speed. In addition, a 10/100BASE-TX Ethernet port is also provided for convenient connection to an Ethernet network or to a broadband Internet via a gateway router.

## Easy Deployment

The DCS-2100G includes everything you need to get started. Simple installation procedures, along with the built-in a web-based interface, offer easy integration into your network environment. The DCS-2100G adheres to the Universal Plug-n-Play specification, which allows computers running Windows XP/ME to automatically recognize the camera and add it to the network. The DCS-2100G can be accessed and viewed from any network place as a device on the network.

By signing up with one of the many free Dynamic DNS services available on the web, you can assign an easy-to-remember name and domain to the camera (e.g. www.mycamera.myddns.com). This allows you to remotely access your camera without having to remember the IP address, even if your Internet Service Provider has changed it.

- High compression ratio recording
- Implemented for intruder detection with still image capture & email notification
- Powerful software for image capture & video recording
- Easy deployment with UPnP & DNS support, web-based configuration

\* 4x digital zoom enlarges an image by magnifying the pixels in a selected portion of the image by 4 times.

# DCS-2100G Technical Specifications

#### Camera Sensor

- Built-in 1/4-inch CMOS sensor
- Automatic gain control (AGC): 24dB
- Automatic exposure (AE)
- Automatic white balance (AWB)
- Electronic shutter: 1/60 to 1/15000 sec.
- Minimum illumination: 1.0 Lux @ f2.0

#### Lens

- Fixed lens
- Fixed focal, (4mm, f2.0) with fine tuning

#### LED indicator

1 bi-color LED indicator for status indication (POST, connection, heartbeat)

#### **Reset button**

Push button to reset to factory default settings

#### Memory

- SDRAM: 16Mbytes
- Flash ROM: 2Mbytes

# Video

- Resolution
- 30fps @ 320 x 240 and 160 x120 - 10fps @ 640 x 480

#### Format

- MPEG4 short header mode compression for streaming video
- JPEG compression for still image
- Compression ratio: 5 levels
- Max. image frame rate: 30fps
- Adjustable image size, quality and bit-rate
  Time stamp and text overlay

# Compression Options

Medium, standard, good, detailed, excellent (user-selectable)

#### Video Sizes

QQVGA, QVGA, VGA (user-selectable)

#### Information Display

Image can be overlaid with text, timestamp and motion detection window

#### Color Modes

Color mode, monochrome mode (user-selectable)

#### Position

Flip and mirror can adjust image position

#### **Image Settings**

Brightness, contrast, hue, saturation (user-adjustable)

#### **Zoom-In** Seamless digital zoom function with up to 4x magnification

# Audio

Audio Input

Built-in omni-directional microphone with S/N more than 60dB

#### Format

- Proprietary, 24Kbps audio codec
- Mono

#### Function

- Can be muted at server side by administrator (camera microphone on/off)
- Adjustable audio volume (PC microphone on/off)

# Network

- Network Interfaces
- 802.3/3u 10/100Mbps Ethernet
- 802.11g wireless LAN

# **Internet Camera**

#### **IP Installation**

IP address is installed at system reboot unless an option is set to fix it

#### **Protocols and Applications**

- DDNS support with several famous DDNS servers
- UPnP support
- NTP client
- SMTP client
- FTP client
- FTP server
- FTP supports passive mode
- HTTP server: max. 10 users to view at a time
- Adjustable server port - SMTP authentication
- SMTP authentication

# Motion Detection

#### Configuration

- 3 motion-detection windows
   2 adjustable parameters: sensitivity and percentage
- 2 adjustable parameters: sensitivity and percent

# Indicator

When motion is detected, users can be informed from the image

## **Built-in Wireless LAN**

### Wireless LAN Standards

- 802.11g - 802.11b

# Data Rates

- 802.11g: up to 54Mbps (6/9/12/18/24/36/48/54Mbps)
- 802.11b: up to 11Mbps (1/2/5.5/11Mbps)

#### **Transmission Technology**

- DSSS

# - DFDM

#### RF Frequency Range

2.4 to 2.4835 GHz ISM band

# **Operating Channels**

1 to 11 channels (FCC) 1 to 13 channels (ETSI)

### Data Modulation Type

QAM64, QAM16, QPSK, BPSK, DBPSK, DQPSK, CCK

#### Antenna

2dBi Gain external dipole antenna (reverse SMA connector)

#### Transmit Output Power

16dBm (typical)

#### Receive Sensitivity (for 802.11b)

- (Typically @PER < 8% packet size 1024 @ 25 °C +/- 5 °C) - 11Mbps (CCK): -80 dBm
- 5.5Mbps (CCK): -83 dBm
- 2Mbps (QPSK): -84 dBm
- 1Mbps (BPSK): -87 dBm

- 36Mbps (OFDM): -70 dBm

- 24Mbps (OFDM): -72 dBm - 18Mbps (OFDM): -77 dBm

- 12Mbps (OFDM): -79 dBm

- 9Mbps (OFDM): -81 dBm - 6Mbps (OFDM): -82 dBm

- Outdoors: Up to 300 meters

\* Environmental factors may adversely affect range.

WEP 64/128-bit data encryption (user-selectable)

**Operating Range \*** - Indoors: Up to 100 meters

Security

#### Receive Sensitivity (for 802.11g)

- (Typically @PER < 8% packet size 1024 @  $25^{\circ}C$  +/-  $5^{\circ}C$ )
- 54Mbps (OFDM): -65 dBm - 48Mbps (OFDM): -66 dBm

# DCS-2100G **Technical Specifications**

# Management & Viewing

**Remote Management** 

Configuration can be accessed via web browser

#### Security

- Administrator and user group protected
- Password authentication

### **Viewing System Requirements**

- Protocol: ActiveX
- Operating System: Microsoft Windows XP, 2000, ME
- Browser: Internet Explorer v.6

# **Physical & Environmental**

**Power Input** 5V DC, 2.0A

**Power Supply** Through external AC switching power adapter

**Power Consumption** 4.3 watts

Dimensions 26.8 (L) x 72.8 (W) x 115.2 (H) mm (camera only, excluding antenna)

Weight 245 grams (camera, including antenna)

**Operation Temperature**  $0^{\circ}$  to 50 °C

Storage Temperature -30° to 75  $^{\circ}C$ 

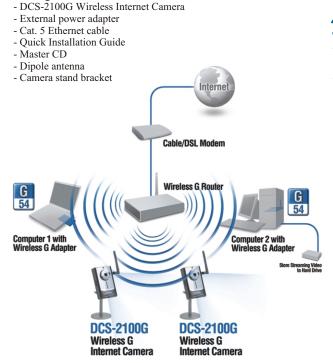
**Operating Humidity** 5% to 95% non-condensing

**Emission (EMI)** - FCC Class B - CE Class B

Radio EN 300 328-2 (07-2000)

Package Includes

Safety EN60950



# **Internet Camera**





Control multiple cameras on a network through the convenience of the Internet from a single computer

# F© (€ ()

# **Ordering Information**

DCS-2100G

nk Corporatio All other trad

Wireless Internet Camera with 10/100BASE-TX Ethernet and 802.11g WLAN interfaces

# Link

ifications subject to change U.S.A Canada . ed trademarks a registered trademarks and m is a trademark of rporation/D-Link System ther trademarks belong to Europe (U. K.) Germany France Netherlands Belgium Italy Sweden Denmark Norway Finland Spain . Portugal Czech Republic Switzerland Greece Luxemburg Poland Hungary Singapore Australia India Middle East (Dubai) Turkey Egypt Israel LatinAmerica Brazil South Africa Russia China Taiwan Rev. 01 (Mar. 2005) Headquarters

TEL: 1-800-326-1688 TEL: 1-905-8295033 TEL: 44-20-8731-5555 TEL: 49-6196-77990 TEL: 33-1-30238688 TEL: 31-10-282-1445 TEL: 32(0)2-517-7111 TEL: 39-02-2900-0676 TEL: 46-(0)8564-61900 TEL: 45-43-969040 TEL: 47-23-897189 TEL: 358-9-2707 5080 TEL: 34-93-4090770 TEL: 351-21-8688493 TEL: 420-(603)-276-589 TEL: 41-(0)-1-832-11-00 TEL: 30-210-9914 512 TEL: 32-(0)2-517-7111 TEL: 48-(0)-22-583-92-75 TEL: 36-(0)-1-461-30-00 TEL: 65-6774-6233 TEL: 61-2-8899-1800 TEL: 91-022-26526696 TEL: 971-4-3916480 TEL: 90-212-289-56-59 TEL: 202-414-4295 TEL: 972-9-9715700 TEL: 56-2-232-3185 TEL: 55-11-218-59300 TEL: 27-12-665-2165 TEL: 7-095-744-0099 TEL: 86-10-58635800 TEL: 886-2-2910-2626 TEL: 886-2-2916-1600

FAX: 1-866-743-4905 FAX: 1-905-8295223 FAX: 44-20-8731-5511 FAX: 49-6196-7799300 FAX: 33-1-30238689 FAX: 31-10-282-1331 FAX: 32(0)2-517-6500 FAX: 39-02-2900-1723 FAX: 46-(0)8564-61901 FAX: 45-43-424347 FAX: 47-22-309085 FAX: 358-9-2707-5081 FAX: 34-93-4910795

FAX: 41(0)-1-832-11-01 FAX: 30-210-9916902 FAX: 32-(0)2-517-6500 FAX: 48-(0)-22-583-92-76 FAX: 36-(0)-1-461-30-09 FAX: 65-6774-6322 FAX: 61-2-8899-1868 FAX: 91-022-26528914 FAX: 971-4-3908881 FAX: 90-212-289-76-06 FAX: 202-415-6704 FAX: 972-9-9715601 FAX: 56-2-232-0923 FAX: 55-11-218-59322 FAX: 27-12-665-2186 FAX: 7-095-744-0099 #350 FAX: 86-10-58635799 FAX: 886-2-2910-1515 FAX: 886-2-2914-6299