



## PAN & TILT WIRELESS N NETWORK CAMERA

### 3G MOBILE SUPPORT

View a live camera feed from your compatible 3G mobile phone or PDA <sup>1</sup>

### PANT/TILT/ZOOM

Enable high resolution monitoring while expanding the survey area with motorized pan/tilt and 16x zoom <sup>2</sup>

### MOTION TRIGGERED RECORDING

Starts recording and sends e-mail alerts upon motion detection

### PRODUCT DESCRIPTION

DCS-5230 is a wireless 802.11n PT network camera with mega-pixel resolution designed for indoor surveillance applications and detail remote monitoring. The built-in Wireless N module provides up to 300Mbps speed and much wider operation range than the normal 802.11g WLAN. Features include a 1.3 megapixel CMOS image sensor, built-in IR LED for low-light capture, micro SD card slot for front-end storage and a WPS button for home users with less security, to set up a wireless connection within minutes\*. Furthermore, to prevent false alarms, DCS-5230 is equipped with a PIR sensor motion detector. Motion is gauged by the temperature of the objects moving into the view of the detector, which automatically sets off an alarm when these objects approach the camera. To sum up, DCS-5230 offers a powerful yet low-cost solution for demanding home/office security needs.

### POWERFUL SURVEILLANCE

DCS-5230 features a built-in infrared LED for night surveillance. DCS-5230 introduces a 1.3 megapixel image sensor that is capable of 10 frames per second at full 1280 x 1024 pixel resolution, and 30 frames per second in 640 x 480 pixels VGA mode. Megapixel resolution provides stunning detail and clarity that is not seen in traditional analog and VGA cameras. In addition they provide large images, and greater power-supply and -consumption savings in comparison with the CCD sensor.

### SHARP IMAGE MONITORING FROM DIFFERENT ANGLES

With sharp, responsive pan/tilt movement and digital zoom, DCS-5230 can monitor from different angles and quickly orientates to focus on any detail. In addition, this camera is designed as a standalone system with a CPU, web server, 16x digital zoom, and advanced video/audio surveillance remote monitoring utility. DCS-5230 provides high quality real-time videos in MPEG-4 and JPEG compression with QVGA/VGA/XGA/SXGA resolution for smoother performance.

### 3GPP MOBILE SURVEILLANCE

DCS-5230 supports 3GPP mobile surveillance. A live camera feed from the camera can be pulled from a 3G cellular network through a 3G cell phone, PDA or any compatible RTSP (Real Time Streaming Protocol) devices. Anywhere within the 3GPP service area, users are offered a flexible and convenient way to remotely monitor their homes or office in real time.

### INTELLIGENT & EASY TO USE

To save disk space and time, images can be recorded to a hard drive only when motions are detected. This eliminates the need for round-the-clock non-stop surveillance. Images can be recorded manually or by a pre-set schedule. Playback consumes little time with triggered event browsing and fast database searching. Users can also set up automated e-mail alerts for all the unusual events. D-ViewCam is included for monitoring and managing 32 cameras in a single display from a central location. Furthermore, the camera provides a Privacy Mode option. Users can set a schedule to hide the camera lens. So, when the camera enters into the privacy mode, the lens rotates backwards and hides to protect the privacy of the owner. The camera adheres to the Universal Plug-n-Play specification, which allows computers running on Windows XP/Vista to automatically recognize the camera and add it to the network. Users can sign up with one of the many free Dynamic DNS services available on the web and assign an easy-to-remember name and domain to the camera (e.g. www.mycamera.myddns.com). This allows them to remotely access the camera without having to remember the IP address.

#### WHAT THIS PRODUCT DOES

D-Link's DCS-5230 is a 802.11n (draft) wireless pan/tilt network camera which is a cost-effective yet powerful security solution for home and SOHO users. With 3G video support and built-in infrared LED for night surveillance, this camera provides day and night real-time monitoring from anywhere within a 3G mobile service. It is also equipped with a 0.5 Lux CMOS sensor that is ideal for low-light conditions. The motorized pan/tilt controls with 4x digital zoom allows you to zoom in on images and take snapshots directly from a web browser. Other added features include a PIR Sensor for motion detection, WPS button for a secure and easy setup of wireless connection. The DCS-5230 delivers high quality real-time videos in MPEG-4 and JPEG that simultaneously allows systems to be optimized for both image quality and bandwidth-efficiency making it ideal security surveillance for small businesses and homes.

#### REMOTE MONITORING OPTION

DCS-5230 features the 3G mobile video support, enabling users to view a live video feed from their camera on a compatible 3G mobile phone or PDA anywhere in a 3G coverage area. This allows users to remotely monitor the camera without having to use a computer. D-ViewCam, IP video management software is also included to manage up to 32 cameras simultaneously from your computer, send automated e-mail alerts, and record video to your hard drive when motion is detected.



#### TECHNICAL SPECIFICATIONS

##### NETWORK PROTOCOL SUPPORT

- + IPv4, ARP, TCP, UDP, ICMP, DHCP Client, NTP Client (D-Link), DNS Client, DDNS Client (D-Link), SMTP Client, FTP Client, HTTP Server, Samba Client, PPPoE, RTP, RTSP, RTCP, 3GPP

##### BUILT-IN NETWORK INTERFACES

- + IEEE 802.11n
- + IEEE 802.11n draft
- 10/100BASE-TX Fast Ethernet with auto-MDI/MDIX support

##### VIDEO ALGORITHM SUPPORT

- + JPEG for still images
- + Enhanced video compression using MPEG4 Simple Profile
- + MPEG4/MJPEG dual format compression

##### VIDEO RESOLUTION

- VGA (640 x 480)
- + 640 x 480 at 30fps
- + 320 x 240 at 30fps
- + 160 x 120 at 30fps
- XGA (1024 x 768)
- + 1024 x 768 at 10fps
- + 512 x 384 at 10fps
- + 256 x 192 at 10fps
- SXGA (1280 x 1024)
- + 1280 x 1024 at 10fps

##### VIDEO FEATURES

- + Adjustable image size and quality
- + Time stamp and text overlays
- + 3 configurable motion detection windows
- + Flip & mirror

##### VIDEO BIT RATE

- + 20K to 4M

##### CAMERA SPECIFICATIONS

- + 1.3 Mega pixel 1/3" CMOS sensor
- + Standard fixed mount type lens, 3.98mm lens, F2.0
- + AGC/AWB/AES
- + Electronic shutter: 1/60 to 1/15000 sec.
- + Standard fixed mount type lens 4mm, F2.0
- + 62° field of view

##### PAN/TILT/ZOOM

- + Pan range: 130° ~ -180°
- + Tilt range: +5° ~ -45°
- + Digital zoom: 4x

##### AUDIO

- + Sample rate GSM-AMR: 12.20kbps, PCM: 8Kbps

##### MICROPHONE

- + Directivity: omni-directional
- + Frequency: 20 ~ 20000Hz
- + S/N ratio: more than 58dB

##### SECURITY

- + Administrator and user group protected
- + Password authentication
- + Wireless LAN security: 64/128-bit WEP, WPA-PSK and WPA2 data encryption

##### SURVEILLANCE SOFTWARE FUNCTIONS

- + Remote management/control of up to 16 cameras
- + Viewing of up to 32 cameras on one screen
- + Supports all management functions provided in web interface
- + Scheduled motion triggered, or manual recording options

##### REMOTE MANAGEMENT

- + Configuration accessible via web browser
- + Take snapshots/video clips and save to local hard drive via web browser

##### SURVEILLANCE

- (Motion detection weekly schedule)
- + Upload snapshots/video clips via email
- + Upload snapshots/video clips via FTP

##### VIEWING SYSTEM REQUIREMENTS

- + Operating System: Microsoft Windows XP, 2000 / Vista/ Linux/ MAC OS X10.3 or above
- + Browser: Internet Explorer v6.0 or above

#### YOUR NETWORK SETUP



#### SUPPORTED PDA, MOBILE PHONES & SOFTWARE

- + Handsets with 3GPP player
- + Packet Video Player 3.0
- + QuickTime 6.5
- + Real Player 10.5
- + Windows 2000, XP, Vista

#### WIRELESS LAN

##### RADIO AND MODULATION SCHEMES

- + 802.11b: DQPSK, DBPSK and CCK
- + 802.11g: BPSK, QPSK, 16QAM, 64QAM, OFDM

##### OPERATING FREQUENCY

2400 to 24835MHz

##### WIRELESS DATA RATES

- + IEEE 802.11n: Up to 300Mbps
- + 802.11b: 11, 5.5, 2 and 1Mbps
- + 802.11g: 54, 48, 36, 24, 18, 12, 9 and 6Mbps

##### RECEIVER SENSITIVITY

- + 802.11b:
  - 11 Mbps (CCK): -84dBm
  - 5.5 Mbps (CCK): -86dBm
  - 2 Mbps (DQPSK): -88dBm
  - 1 Mbps (DBPSK): -90dBm(typically @PER < 8% packet size 1024 and @25° C + 5° C)
- + 802.11g:
  - 54 Mbps (OFDM): -66dbm
  - 48 Mbps (OFDM): -70dbm
  - 36 Mbps (OFDM): -76dbm
  - 24 Mbps (OFDM): -79dbm
  - 18 Mbps (OFDM): -83dbm
  - 12 Mbps (OFDM): -85dbm
  - 9 Mbps (OFDM): -86dbm
  - 6 Mbps (OFDM): -86dbm(typically @PER < 10% packet size 1024 and @25° C + 5° C)

##### Transmitter Output Power

- + 802.11n: 12dBm (typical)
- + 802.11g: 12dBm (typical)
- + 802.11b: 16dBm (typical)

##### Antennas

- 2dBi Gain dipole antenna with reverse SMA plug
- + Operating Frequency: 2.4Ghz

#### PHYSICAL & ENVIRONMENTAL

##### DIAGNOSTIC LED

- + Link/Power LED: Green/Red
- + WPS LED: Blue

##### POWER INPUT

- + 12V, 1.25A switching power adapter
- + External AC-to-DC switching power adapter

##### POWER CONSUMPTION

Max 6 watts

##### DIMENSIONS

110 (H) x 105 (W) x 112 (D) mm  
(4.33 x 4.13 x 4.41 inches)

##### WEIGHT

393 grams (0.87 lb)

##### OPERATION TEMPERATURE

0° to 40° C (32° to 104° F)

##### STORAGE TEMPERATURE

-20° to 70° C (-4° to 158° F)

##### HUMIDITY

20% to 80% non-condensing

##### EMISSION (EMI), SAFETY & OTHER CERTIFICATIONS

- + FCC Class B
- + IC
- + CE
- + C-Tick

##### RADIO

EN 300 328-2 (07-2000)

##### SAFETY

EN60950

##### PACKAGE INCLUDES

- + DCS-5230 camera
- + External power adapter
- + CAT5 Ethernet cable
- + Quick Installation Guide
- + Master CD
- + Dipole antenna
- + Camera stand

<sup>1</sup> The mobile device must have 3G support and subscribe to 3G service from the phone service provider. The playback device must be equipped with 3G video playback such as RealPlayer™ or PacketVideo™.

<sup>2</sup> 16x digital zoom enlarges an image by magnifying the pixels in a selected portion of the image by 16 times.

Use of audio or video equipment for recording the image or voice of a person without his/her knowledge is prohibited in certain countries or jurisdictions. D-Link disclaims any liability whatsoever for any end-user use of D-Link products which fails to comply with applicable laws and regulations.

\* The wireless router must also support WPS function to connect to the network camera.

