



BOSCH
Invented for life

NWC-0455 Dinion IP Cameras



- ▶ High quality digital color IP camera
- ▶ DVD-quality, 4CIF video at up to 30 FPS
- ▶ Storage efficient tri-streaming: Dual MPEG-4 and M-JPEG simultaneously
- ▶ Power over Ethernet (IEEE 802.3af compliant)
- ▶ Direct iSCSI recording
- ▶ Hybrid IP camera with analog and Ethernet outputs
- ▶ NightSense for low light situations
- ▶ Ultra-compact size

Dinion IP cameras are modern, hybrid systems that support legacy-direct analog output, as well as modern network delivery. They can stream video simultaneously on both channels. Supporting the award-winning Dinion digital imaging technology, they provide proven, dependable service for the most demanding security and surveillance requirements.

Functions

Unsurpassed flexibility

The Dinion IP is a true hybrid camera. Equipped with both Ethernet and BNC connections, it can simultaneously stream IP video across a local or wide area network and CVBS video via coaxial cable to support existing analog equipment. It can fit seamlessly into an existing analog system, making use of installed equipment, while providing new IP-based functionality.

There are many ways to access the camera's video: on a PC using a web browser, using Bosch's DiBos Digital Video Recorder, with VIDOS or BVMS video management systems, or via a Bosch IP video decoder for viewing on an analog CVBS or VGA monitor. The BNC connection provides direct input to a conventional analog matrix switcher or DVR, further enhancing the Dinion IP's viewing and recording flexibility.

Efficient bandwidth and storage management

The cameras use MPEG-4 compression, bandwidth throttling, and multicasting capabilities to manage bandwidth and storage requirements efficiently, while delivering the best image quality and resolution. Bosch's innovative tri-streaming feature enables Dinion IP cameras to generate two independent MPEG-4 streams and a M-JPEG stream simultaneously. This allows streaming of high-quality images for live viewing, while recording at a reduced frame rate, and streaming M-JPEG images to a remote PDA device at the same time. The M-JPEG video stream also provides easy integration with third-party JPEG or M-JPEG-compatible video management systems.

The Dinion IP cameras offer unparalleled recording options. Attached to the network, they can use iSCSI devices directly, as well as Network Video Recorders (NVRs). The iSCSI RAID5 storage support enables the cameras to function as a conventional DVR, while streaming high-performance live video across the network. The cameras also offer 10 Mb internal RAM storage.

Cost effective, simple installation

Dinion IP cameras contain a built-in Power over Ethernet (PoE) compliant network adapter. Power over Ethernet transmits power from the network switch, over the Ethernet cable, directly to the camera. This makes installation easier and less expensive, because cameras can now be installed in places where AC power is not available.

The On-Screen Display (OSD) simplifies back focus adjustment and network configuration, minimizing installation and support costs. The Lens Wizard automatically detects the lens type and helps focus the lens at the maximum opening to maintain proper focus throughout the 24-hour cycle. Unlike other IP cameras, no network connection, PC configuration utilities, or other tools are required to set up Dinion IP cameras.

Superior image quality

With a 1/3-inch color CCD and Bosch’s advanced digital signal processing, the Dinion IP provides outstanding image quality in virtually all situations. Automatically activate the NightSense feature to extend sensitivity under low-light conditions by a factor of three in monochrome operation. MPEG-4 compression technology provides DVD-quality, 4CIF video at frame rates of up to 30 images per second for NTSC, and up to 25 IPS for PAL.

Intelligence

The Dinion IP supports increased intelligence at the edge that provides powerful tamper detection for various combined picture cases arising from: video loss, masking, hooding, defocusing, and diverted camera. Bosch also offers Intelligent Video Motion Detection (IVMD) as an additional licensable option. This provides Video Content Analysis (VCA) directly at the video input for even more advanced VCA.

Controls and indicators

- 5 control keys
- Lock slider
- Status LED

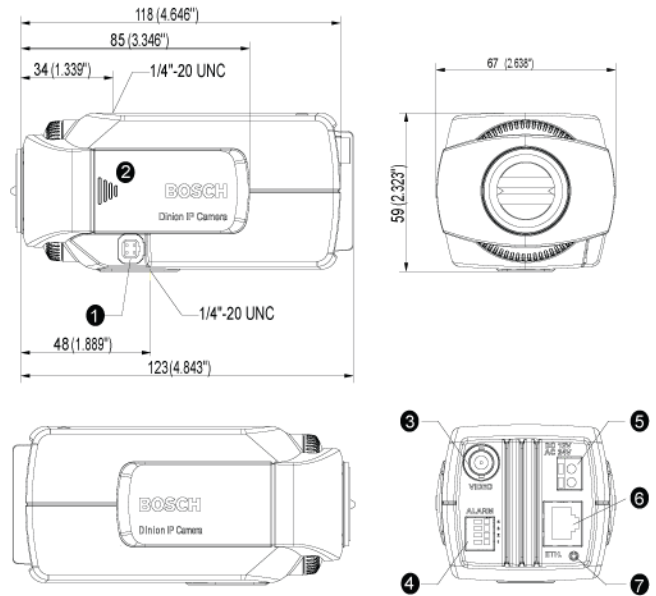
Interconnections

- BNC, video out
- 4-pole push in, alarm in, relay out
- 2-pole push in, external power
- RJ45

Certifications and Approvals

| | |
|-----------|---|
| Safety | acc. to EN 60950-1 (CE) acc. to UL 60950-1; CAN/CSA E 60950-1 |
| Immunity | acc. to EN 50130-4 (CE) |
| Emission | acc. to EN 55022 class B (CE) acc. to EN 61000-3-2 (CE); EN 61000-3-3 (CE) acc. to FCC CFR 47 Part 15, Class B acc. to AS/NZS CISPR 22 (equal to CISPR 22) |
| Vibration | Camera with 500 g (1.1 lb) lens according to IE C60068-2-6 |

Installation/Configuration Notes



Dimensions in mm (in)

| | |
|-----------------------|-------------------------------|
| 1 Lens connector | 5 Power supply input |
| 2 Control buttons | 6 10/100 Base-T Fast Ethernet |
| 3 BNC video output | 7 LED (power, link, traffic) |
| 4 Alarm in, relay out | |

Parts Included

| Quantity | Components |
|----------|----------------------------|
| 1 | Dinion IP Camera |
| 1 | Spare lens connector |
| 1 | C/CS mount conversion ring |
| 1 | Quick Installation Guide |
| 1 | CD-ROM with manual |

Technical Specifications

Electrical

Power

| | |
|-------------------|--|
| Input voltage | +11 to +36 VDC (700 mA) 12 to 28 VAC (700 mA) |
| | Power over Ethernet |
| Power consumption | 8 VA (max) |
| Connector | 2-pole push in |

Video

| | |
|-----------------|--|
| Video standards | MPEG-4; M-JPEG |
| GOP structure | I, IP |
| Data rate | 9.6 Kbps to 6 Mbps (const. and variable) |
| Sensor | 1/3 in. interline CCD |

Sensor Matrix

| | |
|------|-----------|
| PAL | 752 x 582 |
| NTSC | 768 x 494 |

| Resolutions and Frame Rates | PAL | NTSC |
|-----------------------------|-----------|-----------|
| 4CIF: 25/30 IPS | 704 x 576 | 704 x 480 |
| 2CIF: 25/30 IPS | 704 x 288 | 704 x 240 |
| half D1: 25/30 IPS | 352 x 576 | 352 x 480 |
| CIF: 25/30 IPS | 352 x 288 | 352 x 240 |
| QCIF: 25/30 IPS | 176 x 144 | 176 x 120 |

| | |
|------------------|--------------------------------|
| Video Out | 1 x |
| Signal | Analog composite (NTSC or PAL) |
| Connector | BNC, 75 Ohm |
| Video S/N | 50 dB |

| | |
|--------------------|--|
| Sensitivity | (F1.2, 50% signal, scene reflect. 89%) |
| NightSense | 0.26 lx (0.026 fc) |
| Color | 0.65 lx (0.065 fc) |

| | |
|-----------------------------|-------------------------|
| Minimum Illumination | |
| NightSense | 0.12 lx (0.012 fc) |
| Color | 0.30 lx (0.03 fc) |
| Dynamic Range | 60 dB |
| BLC | Center window weighting |
| Gain | 21 dB (max) |
| White Balance | Auto (2500 to 9000 K) |
| Auto Black | On/off selectable |

| | |
|---------------------------|--|
| Electronic Shutter | |
| PAL | 1/50 to 1/125000 s (auto) |
| NTSC | 1/60 to 1/150000 s (auto) |
| Alarm In | +5 VDC nominal, +40 VDC max |
| Relay Out | 30 VAC (max) or +40 VDC, 10 VA continuous (max 0.5 A) |

Software Control

| | |
|--------------------|--|
| Unit Configuration | Via web browser or Configuration Manager |
| Motion Detection | On/off |
| Flicker Control | 50/60 Hz, selectable |
| Contour | Horizontal and vertical, symmetrical |
| Firmware | Flash ROM, remote update |

Network

| | |
|--------------------|---|
| Protocols | Telnet, RTP, HTTP, ARP, TCP, UDP, IP, ICMP, IGMPv2/v3 |
| Ethernet | 10/100 Base-T, auto-sensing, half/full duplex, RJ45 |
| Overall Unit Delay | 100 ms (MPEG-4) |
| PoE | IEEE 802.3af compliant |

Mechanical

| | |
|-------------------------|---|
| Dimensions (H x W x D)* | 59 x 67 x 123 mm (2.32 x 2.64 x 4.84 in.) |
| Weight (without lens) | Approx. 0.45 kg (1 lb) |
| Mounting | ¼ in. tripod on top and bottom |
| Color | Gray, black, and light blue |
| Lens Mounting | C/CS |

Environmental

| | |
|-----------------------|--|
| Operating Temperature | 0 °C to +40 °C (+32 °F to +104 °F) |
| Storage Temperature | -25 °C to +70 °C (-13 °F to +158 °F) |
| Humidity | 20% to 80% relative humidity (noncondensing) |

Ordering Information

| | |
|---|---------------------|
| NWC-0455-10P Dinion IP Camera | NWC-0455-10P |
| 1/3-inch color network camera, PAL, 24 VAC / 12 VDC/PoE, 50 Hz | |
| NWC-0455-20P Dinion IP Camera | NWC-0455-20P |
| 1/3-inch color network camera, NTSC, 24 VAC / 12 VDC / PoE, 60 Hz | |

Software Options

| | |
|---|---------------------|
| NWC-04X5-FS1 | NWC-04X5-FS1 |
| Dinion IP IVMD 1.0 VCA Software License | |

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: +31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security.sales@us.bosch.com
www.boschsecurity.us

Asia-Pacific:
Bosch Security Systems Pte Ltd
38C Jalan Pemimpin
Singapore 577180
Phone: +65 6319 3450
Fax: +65 6319 3499
apr.securitysystems@bosch.com
www.boschsecurity.com

Represented by