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Invented for life

NWC-0455 Dinion IP Cameras

- ▸ Advanced Color CCD Network Camera
- ▸ DVD-quality up to 25/30 IPS at 4CIF
- ▸ Storage efficient tri-streaming: Dual MPEG-4 & JPEG simultaneously
- ▸ Power over Ethernet (IEEE 802.3af compliant)
- ▸ Hybrid IP camera with analog and Ethernet outputs
- ▸ NightSense for lowlight situations
- ▸ Ultra-compact size

The NWC-0455 Dinion IP is a 1/3-inch CCD digital color network camera, designed to ensure the highest possible image quality at all times. This ultra-compact camera provides DVD-like quality MPEG-4 video at up to 25 and 30 images per second (for PAL and NTSC respectively). Dinion IP is a true hybrid camera with both Ethernet and BNC connections capable of providing direct network connection while simultaneously supporting existing analog equipment. Network video signals are sent over IP networks and can be received and displayed on a PC web browser, using the DiBos or VIDOS video management systems, or via a BOSCH Video over IP (BVIP) decoder for viewing on a CVBS or VGA monitor. The BNC connection provides direct input to a conventional analog matrix switcher or DVR, which further enhances Dinion IP's flexible viewing and recording options.
Dinion IP uses MPEG-4 compression, bandwidth throttling, and multicasting capabilities to efficiently manage bandwidth and storage requirements while delivering the best quality image quality and resolution. On-screen Displays (OSD) simplify back focus adjustment and network configuration, leading to lower installation and support costs. Power over Ethernet (PoE) makes installation easier and more cost-effective because cameras can now be installed where there is no AC power outlet.

Functions

MPEG4 video encoding

The Dinion MPEG-4 encoder creates high-quality streaming video at low bit rates, minimizing bandwidth and storage requirements, which further reduces costs. Each Dinion IP camera can deliver up to 25 and 30 images per second (PAL and NTSC) at true 4CIF video resolution.

Tri-streaming Video

Dinion IP cameras can generate two separate MPEG-4 video streams and one JPEG stream simultaneously. This advanced tri-streaming capability, not typically found in other IP CCTV systems, enables the user to tune live viewing and recording requirements to meet specific site and enterprise needs. For example, BOSCH Video over IP Systems (BVIP) can be configured to record video at one quality setting (e.g. 3.75IPS at 2CIF), while simultaneously providing live images at the best possible image quality (e.g. 30IPS at 4CIF). Alternatively, the system can be configured to deliver a high bandwidth MPEG-4 stream to a local LAN user, while simultaneously streaming a low bandwidth MPEG-4 stream to a remote user over a WAN connection and at the same time using the JPEG stream for remote viewing, for instance, on a PDA.

Power Options

Three power options, PoE, 24 VAC and 12 VDC, are available on the NWC-0455. Utilizing PoE makes installation easier and more cost-effective since cameras do not require a local AC power source. Additionally, they can use an uninterruptible power supply (UPS), which will allow for continuous operation even when there's a power failure e.g. in emergencies.

OSD-based network set-up

Network parameters and basic camera set-up (e.g. lens set-up and back focus) are quickly and easily performed using the On-screen Displays (OSD) and BNC composite video output. Unlike other IP cameras, no network connection, PC configuration utilities or other tools are required to set up Dinion IP.

Lens Wizard

The Lens Wizard automatically detects the lens type and helps focus the lens at the maximum opening to ensure proper focus is maintained throughout the 24-hour cycle. No special tools or filters are required.

NightSense

NightSense is used to further extend the excellent sensitivity by a factor of 3 in monochrome operation. This mode can be automatically activated under low light conditions.
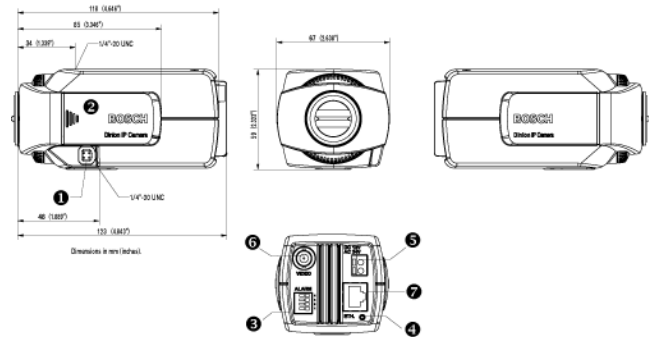
Certifications and Approvals

Electro Magnetic Compatibility

Emission EU	EN55022 class B
	EN 61000-3-2, EN 61000-3-3
Emission USA	FCC CFR 47 part 15 class B
Immunity EU	EN50130-4 Alarm Systems
EMC Australian	AS/NZS CISPR 22 (equal to CISPR 22)
Vibration	Camera with 500 gr (1.1 lbs) lens according to IEC60068-2-6

Safety

EU	EN60950-1
USA + Canada	UL60950-1, CAN/CSA E60950-1

Installation/Configuration Notes

Dimensions

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

Parts Included

Quantity	Components
1	Dinion IP camera
1	Spare lens connector
1	Quick installation guide
1	CD-ROM with manual

Technical Specifications

Electrical

Video Standards	MPEG-4; M-JPEG
Video Data Rate	9.6 Kbps - 6 Mbps Constant & variable
Image Resolution	752x582 (PAL) 768x494 (NTSC)
Video Resolution	704 x 576/480 (4CIF: 25/30 IPS) 704 x 288/240 (2CIF: 25/30 IPS) 352 x 576/480 (Half D1: 25/30 IPS) 352 x 288/240 (CIF: 25/30 IPS) 176 x 144/120 (QCIF: 25/30 IPS)
GOP Structure	I, IP
Overall Delay (IP)	MPEG-4: 100 ms
Select. Frame Rate	1-25/30 IPS (PAL/NTSC); Field / frame based coding
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP
Software Update	Flash ROM, remote programmable
Configuration	Via web browser, built-in web server interfaces
Video Out	1x Analog composite: NTSC or PAL; BNC connector 75 Ohm
Sensitivity[1]	0.65 lux (0.065 fc) (color) 0.26 lux (0.026 fc) (NightSense)
Minimum Illumination	0.30 lux (0.03 fc) (color) 0.12 lux (0.012 fc) (NightSense)
Video Signal-to-Noise Ratio	50 dB
Video Signal Gain	21 dB, (max)
Electronic Shutter	Automatic, 1/50 to 1/125000 sec. (PAL), 1/60 to 1/150000 sec. (NTSC)
Aperture Correction	Horizontal and vertical, symmetrical
Backlight Compensation	Center window weighting
White Balance	Automatic sensing (2500 - 9000 K)
Alarm In	+5 V nominal, +40 VDC max
Relay Out	Max. 30 VAC or +40 VDC, Max 0,5 A continuous, 10 VA
Ethernet	10/100 Base-T, auto-sensing, half/full duplex, RJ-45

1) 50% video signal amplitude, F1.2, scene reflectivity 89%

Environmental

Input Voltage	VDC: 11-36 V (700 mA) VAC: 12-28 V (700 mA) PoE: IEEE 802.3af compliant
Power Consumption	Max. 8 VA
Weight	Approx. 0.45 kg (0.99 lb)
Operating Temperature	0°C - 40°C (32°F - 104°F)
Humidity	20 - 80%, Relative humidity (not condensing)

Ordering Information

Model | Description

NWC-0455-10P Dinion IP Camera
1/3-inch Color Network Camera, PAL, 540 TVL, 24 VAC / 12 VDC / PoE, 50 Hz

NWC-0455-20P Dinion IP Camera
1/3-inch Color Network Camera, NTSC, 540 TVL, 24 VAC / 12 VDC / PoE, 60Hz