


**BOSCH**

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# NWC-0900 Day/Night Megapixel IP Camera



- ▶ **Dual sensors for advanced Day/Night functioning over a wide range of lighting conditions**
- ▶ **3.1 megapixel color, and 1.3 megapixel monochrome resolution**
- ▶ **Selectable resolution and frame rate**
- ▶ **High quality MJPEG video compression**
- ▶ **Integrates with DiBos Hybrid Digital Video Recorder (DVR)**
- ▶ **Power over Ethernet (PoE) or 12 VDC external power source**

The NWC-0900 Day/Night Megapixel IP Camera high-performance, network-controlled camera delivers data to, and can get power from, the Ethernet network. It is equipped with two 1/2-inch sensors for 24-hour surveillance, and switches automatically between color and monochrome sensors according to lighting conditions, ensuring the best possible image at any time. These innovative features combined with high quality image processing, enables it to function well in extreme lighting conditions from more than 100,000 lux, down to 0.01 lux. Both the frame rate and resolution are adjustable, providing precise fine-tuning of the image quality to accommodate bandwidth and storage requirements. Adjustable MJPEG compression further reduces the impact on transmission speed and storage. View full resolution images, live or during playback, with the Bosch DiBos 8 Hybrid digital video recorder. Record and monitor as many as four user-defined zoomed areas per camera for closer examination.

## Functions

### Configuration

Install the camera and network parameters using a simple user interface and easy-to-understand software. The camera may be equipped with a wide variety of C/CS mount lenses.

### Video encoding

The camera produces high-quality streaming video with exceptionally sharp resolution. Advanced MJPEG compression allows the camera to deliver megapixel video resolution at up to 32 images per second over its Ethernet connection.

### Network and power

The camera transfers data at up to 45 Mbit/s over an Ethernet connection. It draws power from the network connection (PoE with full 802.3af compliancy) or from a 12 VDC external power source. PoE allows greater placement flexibility and more cost-effective installation, since cameras do not require a local power source. Attaching an uninterruptible power source (UPS) on a PoE switch allows continuous operation and surveillance, even during power failures.

### Operation

Dual sensor technology provides enhanced night viewing by switching to monochrome imaging when the illumination level is too low to capture colors accurately. The camera automatically senses the illumination level of its field of vision and switches lenses. High quality image processing provides sharp images with high detail and outstanding color accuracy, even in extreme lighting conditions. Selectable resolutions and frame rates,

combined with adjustable MJPEG compression, allow the user to select the best image quality for the given bandwidth or storage restrictions.

#### Interconnections

- RJ45 100 base-T jack
- Power connector

### Certifications and Approvals

Region	Certification	
Europe	CE	Declaration of Conformity
USA	FCC	Declaration of Conformity
Safety	acc. to EN 60950 (CE)	
	acc. to UL 60950-1; CAN/CSA E 60950-1	
Immunity	acc. to EN 55024 IT equipment (CE)	
Emission	acc. to EN 55022 class A (CE)	
	acc. to EN 61000-3-2 (CE); EN 61000-3-3 (CE)	
	acc. to FCC CFR 47 Part 15, Class A	

### Parts Included

Qty	Components
1	NWC-0900 Day/Night Megapixel IP Camera*
2	CS to C mount adapters
1	Quick installation guide
1	CD-ROM with manual and Setup/Viewer software
1	1/16 in. hex key for back focus adjustment

\* Lenses not included

### Technical Specifications

#### Electrical

Power Supply	PoE or external
Rated Voltage (ext.)	12 VDC
Voltage Range (ext.)	9 to 12 VDC
Power Consumption	0.5 A
Connector (ext.)	5 mm, center contact positive
PoE	IEEE 802.3af compliant, RJ45 connector
Video Compression	MJPEG
Sensors	
• Monochrome	½ in. CMOS
• Color	½ in. CMOS
Sensor Matrix	
• Monochrome	1280 x 1024
• Color	2048 x 1536

Resolution	IPS (monochrome)	IPS (color)
• 1280 x 1024	32	32
• 1600 x 1200	NA	24
• 1920 x 1080	NA	22
• 1920 x 1200	NA	20
• 2048 x 1536	NA	15

#### Video S/N

Sensitivity	
• Monochrome	0.01 lx at F1.4 (lowlight exposure)
• Color	1.0 lx at F1.4 (lowlight exposure)
Exposure	
• High Speed	1 to 10 ms, adjustable
• Speed	10 ms (80 ms lowlight)
• Balanced	20 ms (80 ms lowlight)
• Quality	40 ms (200 ms lowlight)
• Moonlight	Up to 500 ms lowlight
Dynamic Range	60 dB
BLC	Auto
Gain	Auto, fixed level selectable
White Balance	Auto, multimatrix

#### Software control

Unit Configuration	Via web browser and proprietary software
MJPEG Quality	Selectable, 21 levels
Min. window Size	32 x 32 pixels
Flicker Control	50/60 Hz, selectable
Firmware	Flash PROM, update via network

#### Network

Protocols	HTTP, ARP, UDP, IP, ICMP, TFTP
Ethernet	100 Base-T, auto-sensing, half/full duplex, RJ45
Overall Unit Delay	2 frames, 45 ms per frame

#### Mechanical

Dimensions (H x W x D)*	63.5 x 76 x 125 mm (2.5 x 3 x 4.9 in.)
Weight*	Approx. 0.45 kg (1 lb)
Mounting	¼ in. tripod on top and bottom
Color	Silver and black
Lens Mounting	CS-mount (C-mount with adaptor)

\* Without lens

#### Environmental

Operating temperature	0 °C to +40 °C (+32 °F to +104 °F)
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Humidity	<90% relative humidity (non-condensing)

**Compatibility table for camera / lens / enclosure**

<b>Lens type</b>	<b>Enclosure Models</b>	
	<b>UHO-HBGS-10</b>	<b>UHI-SBG-0</b>
VLM-0814-MP, 8 mm F1.4, +* Manual iris		–
VLM-1214-MP, 12 mm F1.4, Manual iris	+	–
VLM-1614-MP, 16 mm F1.4, Manual iris	+	–
VLM-2514-MP, 25 mm F1.4, Manual iris	+	–

**Legend**

- + Compatible
- +\* Carefully align close to the window. Some shading may occur due to manufacturing tolerances.
- Not compatible.

**Ordering Information**

<b>NWC-0900 Day/Night Megapixel IP Camera</b> Megapixel Camera, Day/Night, 1.3 MP mono and 3.1 MP color resolution, 12 VDC/POE	<b>NWC-0900</b>
<b>Accessories</b>	
<b>VLM-0814-MP</b> Lens 2/3-inch 8 mm F1.4 C-mount monofocal manual iris	<b>VLM-0814-MP</b>
<b>VLM-1214-MP</b> Lens 2/3-inch 12 mm F1.4 C-mount monofocal manual iris	<b>VLM-1214-MP</b>
<b>VLM-1614-MP</b> Lens 2/3-inch 16 mm F1.4 C-mount monofocal manual iris	<b>VLM-1614-MP</b>
<b>VLM-2514-MP</b> Lens 2/3-inch 25 mm F1.4 C-mount monofocal manual iris	<b>VLM-2514-MP</b>

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