

# NDC-225-PI D/N Infrared IP Dome Camera



The Bosch NDC-225-PI infrared IP dome camera is a ready-to-use, complete network video surveillance system inside a compact camera. This camera brings Bosch's high-performance technology into the realm of small office and retail businesses by offering a cost-effective solution for a broad range of applications.

To use the camera as a stand-alone video surveillance system, simply take it out of the box, assemble it according to the quick installation guide, start it, and walk away – it's already recording. In this mode, no additional equipment is required.

For medium-to-large-scale or growing systems, the camera easily integrates with the Bosch Divar 700 Series recorder. It uses H.264 compression technology to give clear images while reducing bandwidth and storage by up to 30%.

#### **Functions**

# Best-in-class image performance

The camera delivers the clearest images and most accurate colors within its class. Progressive scan ensures moving objects are always sharp.

- Complete network video surveillance system inside a dome camera
- ► Progressive scan for sharp images of moving objects
- ► High performance active infrared illuminator inside the camera for extreme low-light environments
- ► Tri-streaming: Dual H.264 and M-JPEG simultaneously
- Removable microSD/SDHC card offers days of storage inside camera
- PC surveillance software supports multiple camera monitoring
- ► Two-way audio and audio alarm
- ► Power over Ethernet (IEEE 802.3af compliant)
- ► ONVIF conformant

## High performance infrared illuminator

The camera provides effective night vision under extreme low light conditions by using the built-in active infrared illuminator. The illuminator activates automatically when the environment is dark; no additional settings are required.

## Tri-streaming video

Tri-streaming allows a data stream to be encoded simultaneously according to different customized settings. Two types of streams can serve different purposes. For example, use H.264 stream for local recording and viewing, and the M-JPEG stream to provide compatibility with legacy DVRs.

#### **Efficient recording**

A removable microSD/SDHC card offers edge recording inside the IP dome camera. This card not only saves network bandwidth but also reduces the requirement for a high-capacity hard disk or DVR. When used with a microSD/SDHC card, the camera is a complete, self-contained surveillance system without the need for additional equipment.

The camera can also be used with an iSCSI server connected via the network to store long-term recordings.

#### 16-channel PC surveillance software

The bundled PC surveillance software offers a user-friendly interface to support easy installation and configuration. A wizard allows the configuration of multiple cameras simultaneously using an auto detection device. Multiple cameras can be monitored in one screen and video clips on microSD/SDHC cards can be archived, searched, and exported in a single application.

## **ONVIF 1.0 compliant**

The latest Open Network Video Interface Forum (ONVIF) standard ensures compatibility with other surveillance products. This will contribute to a reduction in future upgrade or migration costs.

# Two-way audio and audio alarm

Two-way audio allows remote users to listen in on an area and communicate messages to visitors or intruders via an external loudspeaker (not included). Audio detection can be used to generate an alarm, if needed.

#### Tamper and motion detection

A wide range of configuration options is available for alarms signaling camera tampering. A built-in algorithm for detecting movement in the video can also be used for alarm signaling.

## **Power-over-Ethernet**

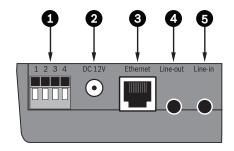
Power for the camera can be supplied via a Power-over-Ethernet (IEEE 802.3af) compliant network cable connection. With this configuration, only a single cable connection is required to view, power, and control the camera.

# **Certifications and Approvals**

Safety	EU: EN 60950-1: 2006, Reference IEC 60950-1:2005
	US: UL 60950-1: 1st edition dated October 31, 2007
	Canada: CAN/CSA-C22.2 NO. 60950-1-03
EMC	EN 50130-4:1995 + A1:1998 + A2:2003
	FCC Part15 Subpart B, Class B
	EMC directive 2004/108/EC
	EN 55022 class B
	EN 61000-3-2 :2006
	EN 61000-3-3: 1995+A1:2001+A2:2005
	EN 55024
	AS/NZS CISPR 22 (equal to CISPR 22)
	ICES-003 Class B
	EN 50121-4:2006
Product Certifica- tions	CE, FCC, UL, cUL, C-tick, CB, VCCI
Power supply	CE, UL, cUL, PSE, CCC

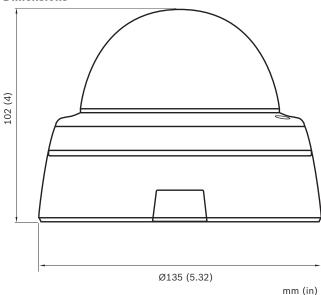
# **Installation/Configuration Notes**

#### **Connections**



1	I/O
2	Power 12 VDC
3	Ethernet RJ45
4	Audio Line-out
5	Audio Line-in

#### **Dimensions**



## Parts Included

Quantity	Component
1	NDC-225-PI infrared IP Dome camera
1	Quick Installation Guide
1	Installation paper sticker
1	Torx screwdriver for Dome cover
1	CD ROM
1	Camera fixing screw kit
1	MicroSDHC card (warranty provided by card manufacturer)
1	Universal power supply with US, EU and UK plug

Technical Specifications		
Power		
Input voltage	+12 VDC or Power-over-Ethernet	
Power consumption	6.6 W (max)	
Video		
Sensor type	¼-inch CMOS	
Sensor pixels	640 x 480	
Sensitivity	1.0 lx (IR off) 0 lx (IR on)	
Video resolution	VGA, QVGA	
Video compression	H.264 MP (Main Profile); H.264 BP+ (Baseline Profile Plus); M-JPEG	
Max. frame rate	30 fps	
Night vision		
Distance	15 m (50 ft)	
LED	32 LED high efficiency array, 940 nm	
Lens		
Lens type	Fixed 4 mm, F1.5	
Lens mount	Board mounted	
Connection		
Analog video out	2.5 mm jack for installation only	
Alarm input	Short or DC 5V activation	
Relay out	Input rating Maximum 1 A 24 VAC/VDC	
Audio		
Audio input	Built-in microphone	
	Line in jack connector	
Audio output	Line out jack connector	
Audio communication	Two-way, full duplex	
Audio compression	G.711, L16 (live and recording)	
Local Storage		
Memory card slot	Supports up to 32 GB microSD/SDHC card	
Recording	Continuous recording, ring recording. alarm/events/schedule recording	
Software Control		
Unit configuration	Via web browser or PC surveillance software	

Network	
Protocols	HTTP, HTTPs, SSL, TCP, UDP, ICMP, RTSP, RTP, Telnet, IGMPv2/v3, SMTP, SNTP, FTP, DHCP client, ARP, DNS, DDNS, NTP, SNMP, UPnP, 802.1x, iSCSI
Ethernet	10/100 Base-T, auto-sensing, half/full duplex, RJ45
PoE	IEEE 802.3af compliant
Mechanical	
Dimensions	Diameter: 135 mm (5.32 in) Height: 102 mm (4 in)
Weight	566 g (1.25 lb) approx.
Environmental	
Operating temperature Camera	-10 °C to +45 °C (14 °F to +113 °F)
Operating temperature Universal Power Supply Unit	0 °C to +40 °C (+32 °F to +104 °F)
Storage temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Humidity	10% to $80%$ relative humidity (non condensing)

# **Ordering Information**

**NDC-225-PI Infrared IP Dome Camera** Infrared IP Dome Camera System including fixed lens and power supply NDC-225-PI

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