

APPLICATIONS

NetComm IP cameras are suitable for a wide range of applications.

Education

Besides capturing acts of vandalism and theft, high schools and tertiary institutions are adopting NetComm IP Cameras for innovative new educational applications such as allowing students access to view science experiments from home via the internet.

Retail

Retail businesses can install NetComm IP cameras to remotely monitor staff, customer activity and customer interaction with staff and in-store traffic flow. To provide a complete retail monitoring solution, NetComm has also partnered with various software providers to complement the camera range.

Construction

Building companies can effectively utilise NetComm IP Cameras to remotely monitor site construction as well as employee and material movements. Key managers can also visually confirm construction progress without being onsite.

Health

Hospitals can use NetComm IP Cameras to monitor patients and viewing medical equipment from remote areas in an instant. Aged care units can also install NetComm IP Cameras to ensure the safety of the elderly.

Warehousing/Logistics

Warehouses can monitor loading and dispatch operations, entrances and exits (including fire exits), shipping and storage areas, entry points and parking areas. Combining a NetComm Smart IP Camera with 11g wireless eliminates the need for costly cabling in sites with large floor areas such as warehouses and campuses, where the cost of camera cabling is prohibitive.

NETCOMM IP CAMERA RANGE

NetComm IP Cameras are designed around a robust camera platform. Under the hood is an ingeniously embedded web and FTP server with a powerful UNIX-like operating system to ensure guaranteed 24/7 operation in the most demanding of environments.

NetComm IP Cameras are rich in features and include the following:

- A state of the art on-board image processor
- An inbuilt web and FTP server
- JPEG and MJPEG video compression
- Real time video at maximum resolution (single view)
- Motion detection capability
- 3 layer password protection for the camera, providing additional security
- 4 external inputs and 1 output trigger to attach devices such as motion sensors or gate control
- FTP/Email/HTTP notification of alarm and event triggers
- Tensile Aluminium Case for superior protection against vandals
- Easy script wizard to set up triggered recording and external alarms
- Interchangeable lens option to any standard CS mount lens
- Easy Network Camera IP Installer tool & quick install guide
- An extensive range of software options for different applications

TECHNICAL SPECIFICATIONS

CAMERA SPECIFICATIONS	NS4000	NS4100	NS4140
Web and FTP server	Yes	Yes	Yes
Frames/second	25 fps	25 fps	25 fps
Screen display	Single camera	1 camera	1 camera
Network interface	10/100 RJ-45	10/100 RJ-45	10/100 RJ-45
Lens zoom	Manual	Manual	Manual
Pan, tilt, zoom support	No	No	No
Indoor/outdoor use	Indoor only	Indoor/Outdoor	Indoor/Outdoor
Video Motion detection	Yes	Yes	Yes
On/Off selectable	Yes	Yes	Yes
Max video resolution	640 x 480	704 x 576	704 x 576
Image sensor	CMOS	Sony HAD CCD	Sony HAD CCD
Lens type	Standard F1.8 6mm	DC-Iris Vari-focal 3.2-10mm F1.4	DC-Iris Vari-focal 3.2-10mm F1.4
Memory buffer	16Mb SDRAM	16Mb SDRAM	16Mb SDRAM
Light sensitivity in colour (Lux)	2.5-10,000	0.5-200,000	0.5-200,000
Modem support	Dial-up/ADSL	Dial-up/ADSL	Dial-up/ADSL
Power supply	14/13.8V AC 1A	14/13.8V AC 1A	12V DC 1A
Alarm activation	4 alarm inputs + video motion detection	4 alarm inputs + video motion detection	4 alarm inputs + video motion detection
Alarm notification	Alarm output/email	Alarm output/email	Alarm output/email
Alarm recording	Single frame snapshot to full- motion video	Single frame snapshot to full- motion video	Single frame snapshot to full- motion video
Video input port	1 (GPIO)	1 (GPIO)	1 (GPIO)
Video output port PAL	1 (BNC)	1 (BNC)	1 (BNC)
Dimensions with lens (mm)	77(w) x 54(h) x 194(l)	77(w) x 54(h) x 194(l)	77(w) x 54(h) x 194(l)
Weight (kg)	1.1kg	1.1kg	1.1kg
Operating temperature	5 – 50 C	5 - 50 C	5 - 50 C

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IP Cameras
NS4000, NS4100, NS4140

YOUR EYE, ONLINE ALL THE TIME

Technology developments such as Broadband and the rise of digital have lead to unprecedented demand for networked video solutions.

Networked video is made possible through IP cameras, which allow remote viewing or recording of images from a Web browser anywhere, at any time. IP Cameras use existing IP network infrastructure, which reduces installation time and costs normally associated with the implementation of traditional CCTV surveillance systems.

NetComm is playing a key role in the uptake of networked video surveillance as an alternative to traditional Closed Circuit Television (CCTV) Systems.

A NetComm IP Camera is like any other network device

With its own IP address, a NetComm IP Camera connects directly to a standard network switch or to a wireless network. This enables viewing of real time digital video over the Internet from any location.

NetComm IP Cameras use existing Network (IP) technology

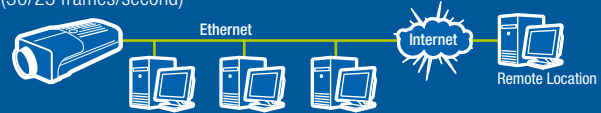
By using existing IP network infrastructure, additional costs related to the installation and deployment of traditional analog CCTV surveillance systems (such as coax cabling, monitors and video recorders) are eliminated. The flexibility of NetComm's IP cameras also makes it economically possible to digitally enable existing analog CCTV systems.

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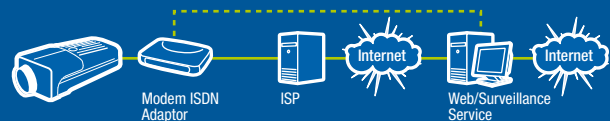
HOW CAN I CONNECT TO A NETCOMM IP CAMERA

IP Cameras can be connected to the Internet/intranet in a number of ways. Some examples are below.
*Frame rates dependant on available bandwidth.

LAN (Local Area Network) - frame rate up to full motion video (30/25 frames/second)



Standard dial-up modem - frame rate up to 2 frames/second.



xDSL connection - frame rate up to full motion video (30/25 frames/second)



Wireless network adapter - frame rate up to full motion video (30/25 frames/second)



FRAME RATE CALCULATIONS

Image Size	Resolution		File Sizes (Byte)/Frame			Frames/Sec.
	NTSC	PAL	Low(24)	Default(16)	High(8)	
Large	704X480	704X576	11K	18K	28K	3
Normal	352X240	352X250	4K	8K	10K	30
Small	176X112	176x144	2k	3k	4k	30

** Additional recording software is required to record images. Images can be viewed using a web browser directly to the camera.

Resolution: NTSC Normal Compression degree: 16(Default)
Frame rate: 30 frames/sec Duration: 1 week

Then the Image size of the record file is about :

8(K Bytes/Frames)
X 30(Frames/Sec.)
X 60(Sec.)
X 60(Min.)
X 24(Hur.)
X 7(Day)
= 145152000(K Bytes)
= 141750 MB
= **138.43GB**



NS4100

The NS4100 is an indoor or outdoor remote monitoring solution. It features a superior CCD image sensor that enables a maximum resolution of 704 x 576, superior video control features such as manual electronic shutter and line lock, a DC Auto Iris vari-focal lens offering a flexible field of view, full-motion video at maximum resolution, a COM port for dial up or ADSL modem connection and a GPIO port (4 input/1 relay output).

NS4000

The NS4000 is an inexpensive solution for remote monitoring of indoor areas such as foyers, hallways, reception areas, retail stores or hotel lobbies. The camera features 640 x 480 resolution, real-time video at maximum resolution, a CMOS VGA image sensor, an interchangeable cs mount lens, a COM port for dial-up or ADSL modem connection and a GPIO port (4 input/1 output) to control devices such as opening doors and gates. It also provides basic video control functions of white balance, auto gain control and electronic shutter.

NS4140

The NS4140 combines the features of a network camera with an infrared illuminator to provide good image quality, even in darkness. The built-in Web server makes it possible to monitor and control it remotely while delivering up to 30 frames per second. It's ideal for surveillance systems that operate in both day and night conditions. It features a superior CCD image sensor that enables a maximum resolution of 704 x 576 and has an IR distance of 10 meters.

MSHTH-S3 – IP CAMERA OUTDOOR HOUSING

An IP Camera requires protection from the elements or any harsh environment when installed for outdoor applications. That is why NetComm has designed a weatherproof camera housing to suit any environment. The housing is solid, coated aluminium with a thick 5mm glass window.

The in-built cooling system also ensures that your IP Camera stays cool when in direct sunlight.

- Anti-corrosive coated aluminium case
- Break resistant 5mm glass screen
- In-built cooling fan
- L 435mm x W 110mm x H 128mm
- Weight 2.5kg

MS1010-1 – IP CAMERA MOUNTING BRACKET

This option allows the mounting of camera housing to a wall.

- Anti-corrosive coated aluminium
- Swivel angle – 360 degrees
- Tilt angle – 90 degrees
- Screw size 25.4mm
- 285mm (L) x 76mm (W) x 97mm (H)
- Weight 0.8kg

NSCS01/NSCS04 – IP Camera Server

NetComm can also provide an IP Camera Server, which enables any CCTV to become IP enabled and viewed over the internet.

The NetComm IP Camera Servers are available in single port and 4 port versions

SOFTWARE

NetComm has partnered with various key software developers to provide enhanced software capability and complete the IP Surveillance solution. Software options currently available offer the following functionality:

- Enhanced network digital recording with multiple camera
- Viewing and recording capabilities
- Advanced motion detection and stationary object detection
- Scheduling of recording.