

# AXIS COMMUNICATIONS 221 DAY & NIGHT NETWORK CAMERA

**A**xis Communications is without doubt one of the biggest manufacturers in the field of network cameras, and since its creation in 1994 the company has delivered many innovative designs to the market. Its latest 221 Network Camera takes surveillance to the next level as not only can it function in any lighting condition, but it also offers simultaneous, Motion-JPEG and MPEG-4 playback with support for Power over Ethernet, with one of the fastest frame rates currently available.

Build quality is superb as the aluminium body is very well engineered. It uses a decent Pentax lens with manual focus and zoom controls and the small power cable on the body allows the camera to automatically adjust the iris for changing lighting conditions. The bundled IP Utility makes installation a cinch, as it searches the network for Axis cameras and displays them ready for initial configuration. Once it has an IP address assigned, you can access the camera via Internet Explorer over HTTP or secure HTTPS sessions.

The browser interface is very easy to use and opens with a live view. The 221 employs a Sony progressive scan CCD sensor, as opposed to the interlaced varieties used in analogue cameras - and it shows, as once the focus had been adjusted correctly, we found overall picture quality the best we've yet seen from any IP camera. Supported frame rates are out of this world as the

221 runs at up to 45 frames per second (fps) for all supported resolutions and can even deliver 60fps at the lower 480 x 360 pixel setting. The bottom line is that this allows the 221 to deliver an extremely smooth video feed which can pick up even fast moving objects.

In Motion-JPEG playback, up to twenty users can access the camera simultaneously; user and group administration maintained on the camera determine whether they can simply view the image or access the camera controls. There's no user limit in multicast MPEG-4 mode, but bear in mind that each user will require a valid license. Bandwidth consumption can be a concern for administrators, but a number of options are provided for limiting the impact these cameras can have on the network. Selecting a lower resolution helps, but image compression can be increased - and you can also determine the length of time the video stream is active for and limit the frame rate for multiple viewers.

The camera incorporates an infra-red sensor, allowing it to switch to a mono image in very low light levels; and Axis offers optional infra-red illuminators, so that areas can be discretely monitored in the pitch black. A removable IR-cut filter is also fitted, allowing colour images to be displayed under IR lighting. This can be removed if you want a high quality mono image at night instead. Motion detection also comes into the frame, and you can specify up



to ten areas in the video image where you want motion to be detected or ignored. The size and position of each object can be customised, as can the camera sensitivity and how long detection is to be triggered for. Event actions are comprehensive, as motion triggers can be used to download images to an FTP or HTTP server and email them to multiple recipients. I/O connector blocks on the rear of the camera can also be used to trigger an event if an external security device, such as a door sensor or alarm is activated.

There's no denying that Axis network cameras just keep getting better - and the 221 is one of the best yet. It delivers excellent image quality plus top frame rates and works in any lighting condition, making it ideally suited to a wide range of IP-based, surveillance applications. **NC**

**Product:** 221 Day & Night Network Camera

**Supplier:** Axis Communications

**Tel:** 0870 162 0047

**Web site:** [www.axis.com](http://www.axis.com)

**Price:** £699 exc