In Focus: IQ eye 762N

The IQ eye 762N is a full featured Full HD indoor camera from IQinVision's 7 Series. This next generation camera provides multiple, individually configured and simultaneous MJPEG streams. Designed with the installer in mind, analog video out along with remote back focus makes installation easy. The 7 Series camera supports PoE and is featuring a moveable IR filter for day and night functionality. The camera provides image controls for optimization of video for any lighting condition. Two-way audio allows for interactive communication between the camera and monitoring site. It also supports the configuration of virtual cameras and permits camera-based movement recognition.

CAMERA TEST

Performance

Assessment of performance at 1,000 Lux
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The IQ eye 762N impresses with a brilliant picture from a well-lit scene. The colors are strong and realistically reproduced, the image is sharp and almost noise-free.

Assessment of performance below 1,000 Lux
When tested at levels below 1,000 Lux the camera delivered a constant 30 frames per second. Here too the image was detailed and with realistic colors. Only at a level well under 100 Lux did slight impairments in the image start to become visible, although there was no dramatic worsening of the image quality. As from 10 Lux a slight blurring can be seen. Worthy of praise is that even at the low light level of 0.5 Lux the camera still did not switch to b/w mode and continued to deliver images in color. The picture noise is of course higher but the color and detail reproduction remains excellent as before.

Assessment of performance in backlight situations
When there is backlight the IQ eye 762N provides overdriven images that could not be used to determine the test parameters. The backlight spread over the entire image and made objects and background unrecognizable. No objective evaluation was therefore possible.

Assessment of performance in use: bandwidth measurement
The H.264 video stream at 30 frames per second provides a predominantly linear average bandwidth usage of 8MB/s. When switching to b/w mode under backlight conditions the bandwidth drops significantly.

Conclusion
The IQ eye 762N provides a consistently good picture with neutral color reproduction under even lighting conditions. For the device used in the tests, however, the backlight performance could not be evaluated due to the high over-modulation of the image. On the positive side, it must be mentioned that the camera still allows objects and movement to be seen even at extremely low light levels.

Technical data for the camera test

Manufacturer	IQinVision
Model	762N
Firmware version	3.1.2
Distance to test chart	0.70 m
Lens used	Tamron MP 4–12mm 1:1.4 ½ CCTV DC
*Focal length set	ca. 6 mm
*Compression method	H.264
*Max. Resolution	1920x1080
*Compression	–
I-Frame-interval	1 second
Max. stream bandwidth	unlimited
Measured frame rate	30 fps
Average bandwidth	8 Mbit/s

* The camera was integrated into the test system using ‚default' settings and modified with the test criteria listed above.

Assessment with differing illumination conditions

Criteria | Lux values	1000 Lux	100 Lux	10 Lux	0,5 Lux	0 Lux + *BL1
Colours	1,5	1,5	1,5	2	–
Contrast	2	2	2	3	–
Focus	1,5	1,5	2	3	–
Motion sharpness	2	2	2,5	2,5	–
Image noise	2	2	2	3,5	–
Recovery from backlight					–
Performance against backlight	–	–	–	–	2.5

Assessment according to the following grades: 1 (Excellent) 2 (good), 3 (average), 4 satisfactory), 5 (limited), 6 (poor). BL= Backlight *in the beam of a white light LED