# Network box camera, 2MP, Day/night, H.264/MJPEG, WDR, ABF, Ultra Low Light

- ✓ 1/1.9" sensor
- ✓ 2 Megapixels Camera @ 60fps
- ✓ Auto Back Focus
- √ 120 dB WDR
- ✓ Quad stream H.264 and MJPEG video
- ✓ 24 Vac, 24 Vdc, 12 Vdc, 802.3af PoE
- ✓ ONVIF Profile S protocol support



### **Description**

The BC822A-HSE is a full featured 2 megapixel IP box with a large sensor for ultra-low light sensitivity and Auto Back Focus. The camera provides high quality, clear images in any situation.

### Multistream high definition

The camera has quad-stream capability for simultaneous streaming of H.264/H.264 or H.264/MJPEG. Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios. 2 Mpixel resolution is available at 60 fps, a full-HD 1080p stream at 60 fps can be combined with a second stream at 30 fps. Each selected resolution-frame rate combination can be freely set to a stream number.

#### **ONVIF**

Multiple options are available to easily integrate the BC822A-HSE to a video management system. In support of open standards, the camera is compliant with the ONVIF Profile S specification.

### **Image optimalisation**

The BC822A-HSE provides automatic day/night functionality with configurable thresholds, for use in low-light situations. Backlight compensation enhances image visibility in difficult lighting situations. The BC822A-HSE provides two modes for wide dynamic range. The first mode uses different gain ratios for different illumined areas to bring details in the darker areas of an image without saturation in the brighter parts. The second mode uses a 2 shutter mechanism which applies two different exposure settings to capture both darker and lighter areas with excellent details. The resulting image is the optimal aggregation of both exposures.

The available image optimalisation methods ensure quality pictures at all times.

### **Power source choices**

The BC822A-HSE can be powered by 12 Vdc, 24 Vdc, 24 Vac, or over the network with 802.3af-compliant PoE sources.

### **Privacy masks**

Privacy masks cover sections of the image. This feature is often requested for such situations as city centre surveillance and point of sale keypads.



### Technical specifications

Camera	
Image sensor	1/1.9" Sensor
Effective pixels	1920(H) x 1080(V)
Minimum scene illumination	0.01 Lux @ F1.5 IRE30, 0.05 Lux @ F1.5 IRE50 color,
	0.0005 Lux @ F1.5 IRE30, 0.005 Lux @ F1.5 IRE50 (b/w)
Shutter speed	1 ~ 1/10.000 sec
Lens mount	C/CS mount
Iris control	DC Drive
Functions	_
Privacy masks	5
Text and picture overlay	Date, time, date & time, text string (15 characters)
Video motion detection	On, Off, By schedule
Video motion detection alarm	Alarm output, record video clip, send alarm message, upload image
Network failure detection	On, Off, By schedule
Network failure detection alarm	Alarm output, record video clip, send alarm message
Tamper detection	On, Off, By schedule
Tamper detection alarm	Alarm output, record video clip, send alarm message, upload
	image
Time laps	On/Off
Time laps action	Upload image
Face detection	On, Off, By schedule
Face detection action	Alarm output, record video clip, send alarm message, upload
	image
Audio detection	On, Off, By schedule
Audio detection action	Alarm output, record video clip, send alarm message, upload
	image
Recording	On, Off, By schedule
Recording destination	SD card/ Network share
lmana control	
Image control	On/Off
Wide dynamic range WDR value	120dB
	Auto, Manual
Exposure White balance	Auto, Manual Auto, ATW, Manual, One push
Contrast	Manual
Brightness Saturation	Manual Manual
Hue	Manual
	Manual
Sharpness Day/Night function	
Day/Night function	Auto, Night, Day, Smart Off, 2DNR (low, modium, high), 2DNR (On/Off), ColorNR (low,
Noise reduction	Off, 3DNR (low, medium, high), 2DNR (On/Off), ColorNR (low, medium, high)
Backlight compensation	On/Off
Digital zoom	16x
Image rotation	Normal, Flip, Mirror, 180° Rotate

www.tkhsecurity.com page 2 of 4

### Technical specifications

Compression algorithm(a)	H 264 (baseling / main / bigh profile): MIDEC	
Compression algorithm(s)	H.264 (baseline / main / high profile); MJPEG	
Number of compression instances	Quad stream. Any combination of H.264 streams with possibly one MJPEG stream.	
Output streams	Any output stream can be freely configured to one of the resolution/frame rate formats.	
Supported resolutions	1920x1080, 1280x1080, 1280x1024, 1280x720, 1024x768, 800x600, 720x480, 640x480, 352x240	
Compression capabilities	(indication, other combinations possible)	
Resolution format	format 1 format 2 format 3 format 4	
H.264 instances in 50/60fps	1920x1080	
(one can be MJPEG)	1280x1024 800x600	
	1280x720 720x480 640x480 -	
H.264 instances in 25/30fps	1920x1080	
(one can be MJPEG)	1920x1080 1280x1024	
	1920x1080 1280x1024 800x600 -	
	1920x1080 1280x720 800x600 720x480	
MJPEG	One of the above resolution formats in each instance can be	
	MJPEG instead of H.264 if the resolution is lower than or equal to	
	1920x1080	
Compression bit rate control	MBR	
Output bit rate (per H.264 stream)	Up to 8192 kbit/s	
Total H.264 output	26624 kbit/s	
Number of video output streams	Up to 20 (RTSP)	
Total output data rate (max) Video frame rate	50000 kbit/s	
	1 to 60 fps / 1 to 50 fps PAL/NTSC	
Analogue video output - Connector type	BNC (1.0 Vpp in 75 Ω)	
- Connector type	ΔΝΟ (1.0 γρρ ΙΙΙ 73 Ω)	
Audio	Line in Line and	
Two-way audio	Line in, Line out	
Compression	G.711 (μ-law, a-law) / G.726	
Bit rate	G.711: 64 Kbps G.736: 16 Kbps, 34 Kbps, 33 Kbps, 40 Kbps	
Sample rate	G.726: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps G.711: 8 KHz / G.726: 8 KHz	
Input level, Output level	Adjustable gain	
Connector type	Female phone jack, ø 3.5 mm (2x)	
	Terriale priorie jack, 9 5.5 mm (2x)	
Data Social port	DC 405 2 wire	
Serial port Protocols	RS-485, 2-wire	
	Pelco D, Pelco P  Multifunction terminal block (D+, D-)	
Connector type	ividitii diictiori terriiriai block (D+, D-)	
Alarm inputs/output	0.51/4010 . #	
Input	0 - 5 V, 10 kΩ pull-up	
Output Operational modes	1x Photo relay output 300 Vdc/ac	
Operational modes	Normally open; normally closed	
Connector type	Multifunction terminal block (I1+, I- I2+, O+, O-)	
Storage		
Storage options	Supports up to 128 GB capacity of SD/SDHC/SDXC memory (fat32)	
	NAS	

www.tkhsecurity.com page 3 of 4

### Technical specifications

Network	
Interface(s)	10/100 Ethernet
Network protocols	ARP, DHCP, FTP, ICMP, IEEE 802.1 X, IPv4/IPv6, PPPoE, QoS, RTP, RTSP, SMTP, SNMP, TCP/IP, UDP, UPnP
Connector type	RJ-45
Management	
Supported browsers	Internet Explorer (6.0+), Chrome, Firefox, Safari
Security	User account, HTTPS, IP Filter, IEEE 802.1x
Protocols	UPnP, SNMP, ONVIF Profile S
Password levels	User and Administrator
User accounts	20
Powering	
Power consumption	Max. 8 W
Power	24 Vac / 24 Vdc / 12 Vdc / 802.3af PoE
Connector type	
Environmental	
Operating temperature	-10 °C to +50 °C
Relative humidity	10% to 90%, no condensation
Mechanical	
Dimensions (camera body)	76 x 52 x 152 mm (2.99 x 2.05 x 5.98 ln) (without lens)
Weight	0.36 kg (0.79 lbs)
Color	Black/Grey
Ordering information	
BC822A-HSE	Network box camera, 2MP, Day/night, H.264/MJPEG, WDR, ABF, Ultra Low Light
WM04A	Wall mount
Accessories	
WM04A	Wall mount

#### **Dimensons**







