Basler IP Camera BIP-640c

Features and Benefits

The Basler IP Camera BIP-640c with its standard resolution of 640 × 480 pixels (VGA) impresses especially because of its high frame rates, which can be realized not only by deploying the MJPEG encoder, but also MPEG-4 and H.264 respectively. The usage of a high performance CCD image sensor from Sony provides exceptional sensitivity for low lighting conditions. With reference to the outstanding compact metal housing the BIP-640c represents a convincing alternative compared to conventional VGA network cameras.

Performance characteristics:

- **Progressive scan** as the basis for exceptional image quality with reduced motion blur.

- **Ideal image quality** assured via a set of flexible control functions. The use of configurable measurement windows for exposure control makes it possible to obtain e.g. the best automatic brightness for a scene.

- **Video compression** with standards-compliant MJPEG, MPEG-4, or H.264 encoding. This flexible approach allows the customized use of multiple MJPEG streams while also using an MPEG-4 or H.264 encoded stream. The resolution and frame rate of the MJPEG image streams and the MPEG-4 or H.264 stream can be independently adjusted.

- **Scaling and AOI functionalities** support customized resolutions. To display a maximum of detail with the highest precision, any image format and aspect ratio can be configured. This means that only relevant image data will be transmitted, leading to a significant reduction in bandwidth utilization and maximizing storage utilization.

  The unique AOI feature lets users define regions within the original field of view. The regions can be streamed separately to realize not only ePTZ but also multiple virtual cameras.

- **Motion detection** with an array of 32 × 24 definable fields for up to 5 different masks. Motion detection can be combined with extensive event and alarm management functionality. Configurable internal ring buffer storage makes it possible to access pre and post alarm images.

- **Power over Ethernet (IEEE 802.3af)** capability means that power can be supplied to the camera via the same cable used for the network connection.

- **Compact metal housing** with an 89.2 mm × 29 mm × 44 mm size and a weight of only 230 g.

What Makes Basler Camera Quality So Special?

To ensure consistently high product quality, we employ several inspection procedures during manufacturing. The following list indicates some of the most important quality assurance tools we use to meet your highest requirements.

Camera Sensor Alignment Tool (CSAT):

Due to higher resolutions and smaller pixels, depth of focus and the exact positioning of the imaging sensor in the camera are becoming more and more critical. An area scan sensor must be aligned in six degrees of freedom.
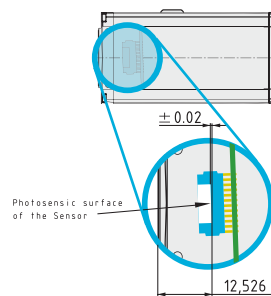
The back focal length on each camera is carefully measured and adjusted by our patented "CSAT" procedure. This guarantees an optimum distance between the lens flange and the sensor and ensures outstanding image quality based on compliance with optics standards.

Camera Test Tool (CTT+)

Our advanced Camera Test Tool (CTT+), the first fully automated inspection system for digital cameras, checks all of the significant quality aspects of each camera we produce. The CTT+ is a unique combination of optics, hardware, and software that can be quickly and efficiently used to calibrate a camera and to measure its performance against a set of standards. For defined sets of conditions, an automated software program examines the camera's output, makes any calibration adjustments necessary, and compares the output to a strictly defined set of performance criteria.

Basler customers get a 100% tested camera, all of the benefits that go along with 100% testing, and a much higher level of satisfaction. This is a definite win-win situation.


click. see. smile!

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Specifications

Basler BIP-640c			
Image Sensor	1/3'' Sony Wfine progressive scan RGB CCD		
Effective Pixels	640 (H) x 480 (V)		
Frame Rate			
	MJPEG	MPEG-4	H.264
	Full Resolution: 30 fps	30 fps	19 fps
	D1 (720 x 480): 30 fps*	30 fps*	18 fps*
	(The maximum sensor readout rate is 71 fps)		*scaled
Pixel Size	7.4 µm x 7.4 µm		
Sensitivity	0.98 lux (F 1.0 / 30 ms)		
Lens (not included)	CS-mount, DC iris drive		
Image Settings	Automatic gain, exposure area, backlight compensation, white balance, electronic shutter, 180° image rotation, electronic PTZ via AOI (API), text overlay, privacy masks, motion detection		
Resolution	From 64 x 40 to 640 x 480 (free scaling), 4:3, 16:9, multiple Areas of Interest (AOIs)		
Video Compression	Motion JPEG: Multiple compression Levels MPEG-4: SP (Level 3), ASP (Level 5) H.264 (MPEG-4 AVC): Baseline (Level 3)		
Video Streaming	Simultaneous dual encoding for MJPEG and MPEG-4 or H.264, Multi-streaming for MJPEG, multicast and unicast, VBR and CBR for MPEG-4 and H.264		
Alarm Management	Ring buffer for pre and post alarm Events triggered by motion detection, external input, or scheduling Image upload over FTP, Email, or HTTP		
Protocols	TCP/IP, HTTP, UDP, ICMP, ARP, DHCP, NTP, RTP, RTSP, RTCP, SMTP, IGMP, UPnP		
Processor/Memory	600 MHz dual-core multimedia DSP, FPGA 128 MB RAM, 8 MB flash, battery backed-up real-time clock		
Power	PoE (Power over Ethernet IEEE 802.3af) or 7 to 20 VDC, power consumption is 5 W max at 12 VDC		
Connectors	Screwable RJ-45 connector for 10/100 BASE-T Ethernet, full or half duplex 6 pin Phoenix terminal for DC power, digital I/O and RS-232		
Operating Conditions	0° to 50° C (32° to 122° F), 20 % to 80 % relative humidity (non-condensing)		
Standards	FCC Class B, CE, RoHS		
Housing	89.2 mm x 29 mm x 44 mm (full metal casing)		
Weight	~230 g		

Specifications are subject to change without prior notice.
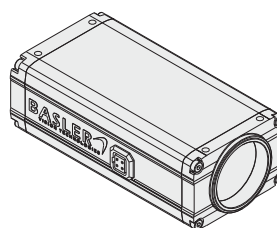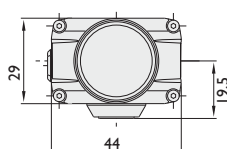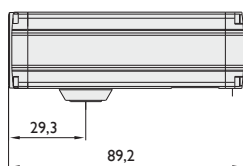
Dimensions (in mm)

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www.basler-ipcam.com

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