LTC 0510 Series
High Performance Monochrome Cameras

Security Systems



- 15-bit DSP Technology
- XF-Dynamic
- Bilinx Communication
- Default Shutter
- Lens Wizard
- Auto Black
- Video Motion Detection
- Exceptional IR sensitivity

The LTC 0510 Series of High Performance 1/2-inch Digital CCD Monochrome Cameras create the best possible image, even under the most difficult light and scene conditions. The unique 15-bit digital video processing enhances sensitivity while XF-Dynamic extends the dynamic range.

The camera employs the best 1/2-inch CCD available as well as advanced front end processing combined with the outstanding Dinion DSP. These result in astonishing sensitivity, providing better color images in low light situations and sharper daytime images. Intelligent White balance algorithms, supported by a White Balance Hold function and even full manual white balance, ensure the most accurate color reproduction possible.

All Dinion cameras are supplied ready to operate. Simply attach and focus the lens, then connect power to provide optimal pictures under virtually all scene conditions. No tools are required for back focus and power connection. For especially challenging situations where fine tuning or special settings are required, the camera parameters can be individually set using the control buttons on the side of the camera and On-screen Display (OSD). Also, to aid installation, the camera automatically detects the lens type. The Lens Wizard ensures accurate (back)focusing for perfectly sharp pictures at all times.

XF-Dynamic
XF-Dynamic provides extended dynamic range. The highly accurate 15-bit digital signal is automatically processed to optimally capture the detail in both the high and low light areas of the scene simultaneously, maximizing the information visible in the picture.

Bilinx Technology
Bilinx is a bi-directional communication capability embedded in the video signal of all Bosch Dinion cameras. Technicians can check status, change camera settings and even update firmware from virtually anywhere along the video cable. Bilinx reduces service and installation time, provides for more accurate set-up and adjustment, and improves overall performance. In addition, Bilinx uses the standard video cable to transmit alarm and status messages, providing superior performance without additional installation steps.

Video Motion Detection
The built-in video motion detector allows you to select up to four fully programmable areas with individual thresholds. The global scene change detector minimizes false alarms caused by sudden lighting condition changes, such as switching on or off the indoor or security lighting. When motion is detected alarms may be displayed in the video signal while the output relay can be closed in addition to alarm message transmission on Bilinx.

Auto Black
The automatic black level feature enhances contrast by removing veiling glare from the picture or when contrast is reduced by fog or mist.

Default Shutter
The LTC0510 features a fast, default shutter speed in sufficient lighting conditions to capture moving objects. When light levels fall and other adjustments have been exhausted, the shutter speed reverts to the standard setting to maintain sensitivity.

Back Light Compensation (BLC)
Offering a fully programmable BLC area of interest, and a variable BLC level, the camera can be easily set up for even the most challenging entrance applications.

Lens Wizard
The installed lens type is automatically detected. The Lens Wizard allows for proper focusing of the lens at the maximum lens opening, to ensure that focus is maintained throughout the entire 24-hour day/night cycle. No special tools or filters are required.

Programmable Modes
Three independent, preprogrammed operating modes support typical applications, but are fully programmable for individual situations. Switching between modes is easy via Bilinx or the external alarm input.

SensUp
By increasing the integration time on the CCD up to 10 times, the effective sensitivity is dramatically enhanced. This is especially useful when relying only on moonlight for illumination.

SPECIFICATIONS

Type numbers	LTC 0510/10	LTC 0510/50	LTC 0510/20	LTC 0510/60
CCD type	1/2-inch interline			
Active pixels	752 x 582 (CCIR)		768x492 (EIA)	
Sensitivity (Full video)*	0.16 lux			
Sensitivity 50 IRE*	0.032 lux			
Minimum illumination*	0.021 lux			
Min. Resolution	570 TVL			
SNR	> 50 dB			
Video output	1 Vpp, 75 Ω			
Synchronization	Internal, Line lock or Genlock selectable			
Shutter	Auto (1/60 (1/50) to 1/500000), Fixed, Flickerless, Default			
Sensitivity up	Off, Automatic continuous up to 10x			
Auto Black	On, Off selectable			
Dynamic Range	32x dynamic range enhancement			
Dynamic Noise				
Reduction	Auto, Off selectable			
Contour	Sharpness enhancement level selectable			
BLC	Off, Area and Level selectable			
Gain	Auto (maximum level selectable to 28 dB)			
	or fixed level selectable			
Lens Mount	C/CS			
VMD	4 area, sensitivity selectable			
Alarm output	VMD or Bilinx			
Alarm Input (TTL)	Profile switching, +5 V nominal, +40 Vdc max			
Alarm Output Relay	max. 30 Vac or +40 Vdc, Max 0,5 A continuous, 10 VA			
External sync input	75 Ω or High Impedance selectable			
Cable compensation	Up to 1000 m (3000 ft) coax without external amplifiers			
	(automatic set-up in combination with			
	coaxial communication)			
Camera ID	16 character editable string, position selectable			
Lens types	Manual, DC and Video Iris auto-detect with override			
	DC iris drive: max 50 mA continuous			
	Video iris: 11.5 ± 0.5 VDC, max 50 mA continuous			
Remote control	Bi-directional coaxial communication			
Power Consumption	4 W			
Power Supply	12-28 VAC	110-240 VAC	12-28 VAC	110-240 VAC
	11-36 VDC	50 or 60 Hz	11-36 VDC	50 or 60 Hz
Dimensions	59 x 67 x 122 mm (2.28 x 2.6 x 4.8 inch) (hxwxl) without lens			
Weight	450 g (0.99 lbs) without lens			
Tripod mount	Bottom (isolated) and top 1/4" 20 UNC			
Operating temperature	–20 °C to +50 °C (–4 °F to +122 °F)			
Controls	OSD with softkey operation			

**Scene illumination, F1.2 lens, 89% scene reflectance, Sens Up Off*

ENVIRONMENTAL

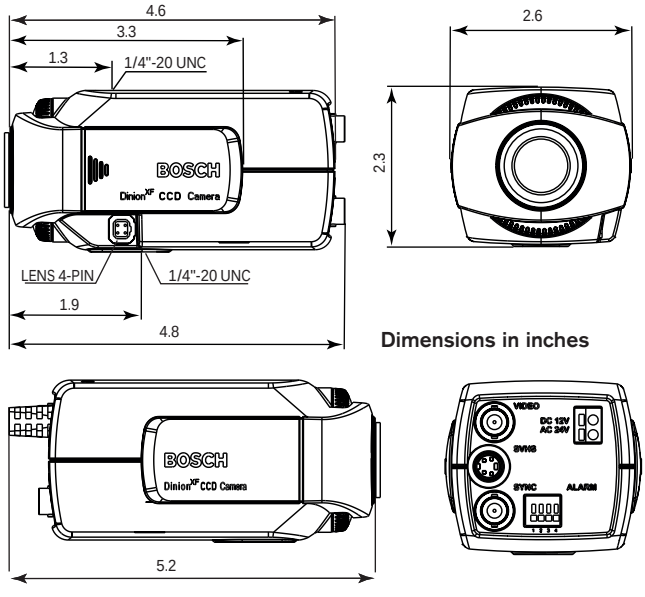
Storage temperature	-25 °C to +70 °C (-13 °F to +158 °F)
Ambient humidity	Operating: 20% to 93% RH, storage up to 98% RH
Electro Magnetic Compatibility	
Emission	EN55022 class B, FCC class B part 15
Immunity	EN50130-4 Alarm Systems, Part 4
Vibration	Camera with 500 gr (1.1 lbs) lens according to
	IEC60068-2-27
Safety	EN60065 (/10 and /50 models)
	UL6500, cUL CAN/CSA E60065-00
	(/20 and /60 models)

OPTIONAL

Accessories	VP-CFGSFT	
	Configuration software for cameras using Bilinx.	
	Includes VP-USB Adaptor.	
Power transformers		
TC1334	120 VAC, 60 Hz	24 VAC, 30 VA
TC120PS	120 VAC, 60 Hz	15 VDC, 9 VA
TC220PSX-24	220-240 VAC, 50/60 Hz	24 VAC, 20 VA
TC220PS	220-240 VAC, 50/60 Hz	15 VDC, 9 VA

RECOMMENDED LENSES

Varifocal lenses		
LTC 3264/30	1/2" DC-iris, 4.5-10 mm	F1.6-360
LTC 3274/40	1/2" DC-iris, 7.5-75 mm	F2.2-360
Zoom lenses		
LTC 3283/20	1/2" Video-iris, 8-48 mm	F1.4-360



Dimensions in inches

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