

LTC0610 Series

High Performance

Color Cameras



Security Systems



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

The LTC0610 Series of High Performance 1/2-inch Digital CCD Color Cameras create the best possible image, even under the most difficult light and scene conditions.

Based on unique 15-bit image processing technology, these cameras offer superb sensitivity combined with extended dynamic range coverage without artifacts. By employing the best CCD available, advanced front end processing, combined with the outstanding Dinion DSP the cameras achieve an astonishing sensitivity, providing better images in low light situation and sharper images during daytime.

As with all cameras in the Dinion range, the cameras are shipped ready to use. Simply attach and focus the lens, and power to provide optimal pictures under virtually all scene conditions. The camera automatically detects the lens type. Correct focusing is made as easy as possible by the Lens Wizard, ensuring perfectly sharp pictures at all times.

For those special situations where fine tuning or special settings are required, a simple OSD menu tree operated from control buttons on the side of the camera gives direct access to all functions. Moreover the cameras incorporate the Bilinx bi-directional communication, which enables set-up, control and even firmware upgrade over the standard video coaxial cable.

XF-Dynamic

The camera automatically processes the unique and highly accurate 15-bit video signal to optimally simultaneously show the detail in both the high light and low light parts of the scene.

Video Motion Detection

The onboard video motion detector uses up to 4 fully programmable areas with individual thresholds. A built in global scene change detector eliminates false alarms caused by sudden changes in the lighting

conditions, like switching on or off the indoor or security lighting. Alarms can be displayed on screen, be used to close the alarm output relay of the camera and can be communicated via the Bilinx communication.

Default Shutter

When sharp images of moving objects are required the cameras can be set a fast default shutter speed to avoid motion blur in the scene. This shutter speed is maintained for as a full level video output signal can be produced using the iris control and AGC. Only then is shutter slowed down to preserve the sensitivity in low light.

Programmable Modes

The camera supports 3 independent operating modes (profiles), which are fully programmable. Via the Bilinx communication or via the external alarm input easy switching between these modes is possible.

Lens Wizard

The cameras auto-detect the lens type. The Bosch lens wizard can be used to focus the lens with maximum lens opening ensuring focus is maintained throughout the entire 24-hour day/night cycle.

NightSense

9 dB extra sensitivity is achieved by summing the signal from the pixels normally used to produce the colour picture and produce a monochrome image with improved S/N ratio

SensUp

By increasing the integration time on the CCD up to 10 times, the effective sensitivity is dramatically enhanced, especially useful where there is no artificial lighting and you rely on the moon, stars and scattered radiation.

Security you can rely on

BOSCH

SPECIFICATIONS

Type numbers	LTC0610/10	LTC0610/50	LTC0610/20	LTC0610/60
CCD type	1/2-inch interline			
Active pixels	752 x 582 (PAL)		768x492 (NTSC)	
Sensitivity (Full video)	0.72 lux			
Sensitivity 50 IRE	0.35 lux / 0.14 lux (NightSense)			
Minimum illumination	0.23 lux / 0.095 lux (NightSense)			
Min. Resolution	480 TVL			
SNR	> 50 dB			
Video output	1 Vpp, 75 Ω			
Y/C output	Y: 1 Vpp / C: 0.3 Vpp			
Synchronization	Internal, Line Lock, HV-lock and Genlock (Burst lock) selectable			
Shutter	Auto (1/50 to 1/500000), Fixed, Flickerless, Default			
NightSense	Auto, Forced, Off			
Sensitivity up	Off, Automatic continuous up to 10x			
Auto Black	On, Off selectable			
Dynamic Range	32x dynamic range enhancement			
Dynamic Noise Reduction	Low, Medium, High, 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			
White balance	ATW (2500 - 10000 K), AWB hold, Manual WB selectable			
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 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	58 x 66 x 122 mm (2.28 x 2.6 x 4.8 inch) (hwxl) 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 +131 °F)			
Controls	OSD with softkey operation			

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 lens according to IEC60068-2-27	
Safety	EN60065 (/10 and /50 models) UL6500, cUL CAN/CSA E60065-00 (/20 and /60 models)	
Accessories	VP-CFGSFT Configuration software for cameras using Bilinx. Includes VP-USB Adaptor.	

Power transformers

TC1334	12 VAC, 60 Hz	24 VAC, 30 VA
TC120PS	12 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

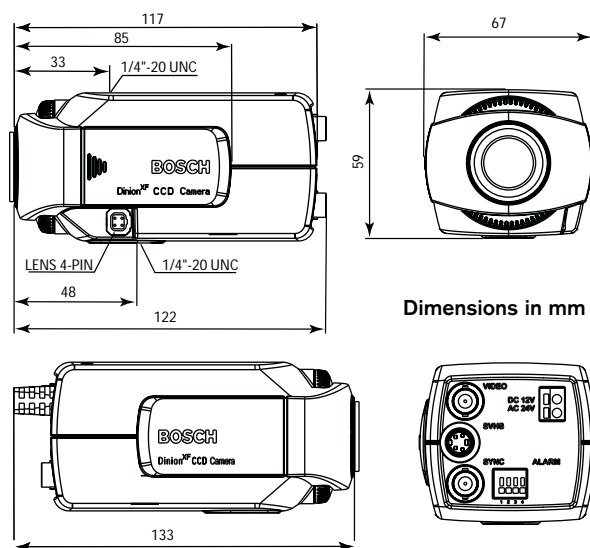
RECOMMENDED LENSES

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 mm

Bosch Security Systems.
5600 JB Eindhoven
The Netherlands
Tel: +31 (40) 27 80000
Fax: +31 (40) 27 80001
www.boschsecuritysystems.com

BOSCH