

# LTC 0385 Series DinionXF Monochrome Cameras



- ► 15-bit DSP technology
- ► XF-dynamic
- ► Bilinx communication
- Default shutter
- ► Lens wizard
- Auto black
- Video motion detection

The LTC 0385 Series of High Performance 1/3-inch Digital CCD Monochrome Cameras create the best possible image, even under the most difficult light and scene conditions. Based on unique 15-bit digital video processing technology and employing XF-Dynamic, these cameras provide excellent sensitivity with extended dynamic range. By employing the best 1/3-inch CCD available, advanced front end processing, combined with the outstanding Dinion DSP, the cameras achieve an astonishing sensitivity, providing better images in low light situations and sharper daytime images.

All Dinion cameras are supplied ready to operate. Simply attach and focus the lens, and connect power to provide optimal pictures under virtually all scene conditions. No tools are required for back focus and power connection. For extra 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, and using the Lens Wizard ensures accurate (back) focusing for perfectly sharp pictures at all times

# **Functions**

# XF-Dynamic

Extended dynamic range is brought to a new level on the LTC 0385 Series Camera by XF-Dynamic technology. XF-Dynamic automatically processes the highly accurate 15-bit digital signal to optimally capture the detail in both the highlight and lowlight areas of the scene simultaneously, to maximize the information visible in the picture.

# **Bilinx Technology**

The LTC 0385 series cameras incorporate Bilinx. Bilinx is a bidirectional communication capability embedded in the video signal of all Bosch Dinion cameras. With Bilinx 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, 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**

When viewing moving objects a fast shutter speed is required. When using a fast shutter speed the lens opening or gain control needs to be increased to maintain the video signal. The camera sensitivity is limited by the fast shutter speed. The default shutter setting of the LTC 0385 offers the best of all worlds, fast shutter speed as long as there is sufficient light, however as the light level falls, when other adjustments have been exhausted, the shutter reverts to the standard setting maintaining the cameras excellent 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 LTC 0385 series automatically detects the type of lens installed. The Lens Wizard will focus 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**

The camera supports three independent operating modes. The 3 modes are preprogrammed for 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, especially useful where there is no artificial lighting and you rely on the moon, stars and scattered radiation.

# **Certifications and Approvals**

# **Electromagnetic Compatibility**

| Emission | EN55022 class B, FCC class B part 15 |
|----------|--------------------------------------|
| Immunity | EN50130-4 Alarm Systems, Part 4      |

# **Electromagnetic Compatibility**

Vibration Camera with 500 gr (1.1 lbs) lens according to

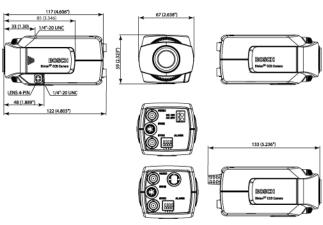
IEC60068-2-27

# Safety

EN60065 (/10 and /50 models)

UL6500, cUL CAN/CSA E60065-00 (/20 and /60 models)

# **Installation/Configuration Notes**



Dimensions in mm (inches)

# **Parts Included**

| Quantity | Components   |
|----------|--|
| 1        | LTC 0385 Series Dinion <sup>XF</sup> Monochrome Camera |
| 1        | Spare male 4-pin lens connector                        |
|          | Lens not included                                      |

# **Technical Specifications**

# **Electrical**

| Model No.                   | Voltage Ra             | ange   |                                    | System                |  |
|-----------------------------|------------------------|--|------------------------------------|-----------------------|--|
| LTC 0385/10                 | 12 - 28 V<br>11 - 39 V |  | 45 - 65 Hz                         | CCIR                  |  |
| LTC 0385/20                 | 12 - 28 V<br>11 - 39 V |  | 45 - 65 Hz                         | EIA                   |  |
| LTC 0385/50                 | 85 - 265 \             | VAC  | 45 - 65 Hz                         | CCIR                  |  |
| LTC 0385/60                 | 85 - 265 \             | VAC  | 45 - 65 Hz                         | EIA                   |  |
| Power Consumpt              | ion                    | 4 W  | 4 W                                |                       |  |
| Imager                      |                        | Interline transfer CCD<br>1/3-inch image format  |                                    |                       |  |
| Active Pixels               |                        |  |                                    |                       |  |
| CCIR Models:                |                        | 752 H x 582 V  |                                    |                       |  |
| EIA Models:                 |                        | 768 H x  | 492 V                              |                       |  |
| Sensitivity                 |                        |  |                                    |                       |  |
| Sensitivity (Full v         | ideo)1)                | 0.23 lux   | (0.023 fc)                         |                       |  |
| Sensitivity 50 IRE          | 1)                     | 0.046 lu   | x (0.0046 fc)                      |                       |  |
| Minimum Illumina            | ation <sup>1)</sup>    | 0.031 lu   | x (0.0031 fc)                      |                       |  |
| Minimum Illumina<br>Sens UP | ation with             | 0.0031   | lux (0.00031 fc)                   |                       |  |
| Horizontal Resolution       |                        | 570 TVL  |                                    |                       |  |
| Signal-to-Noise-Ratio       |                        | > 50 dB  |                                    |                       |  |
| Video Output                |                        | 1 Vpp, 75 ohm  |                                    |                       |  |
| Synchronization             |                        | Internal, line lock or genlock selectable  |                                    |                       |  |
| Electronic Shutte           | er                     | Auto (1/<br>erless, d  |                                    | 00000), fixed, flick- |  |
| Sensitivity Up              |                        | Off, auto  | matic continuou                    | s up to 10x           |  |
| Auto Black                  |                        | On, off s  | electable                          |                       |  |
| Range                       |                        | 32x dyn  | amic range enha                    | ncement               |  |
| Noise Reduction             |                        | Auto, off selectable   |                                    |                       |  |
| Contour                     |                        | Sharpne  | ss enhancement                     | level selectable      |  |
| BLC                         |                        | Off, area and level selectable   |                                    |                       |  |
| Gain                        |                        |  | aximum level sele<br>el selectable | ectable to 28 dB) or  |  |
| VMD                         |                        | 4 area, s  | ensitivity selecta                 | able                  |  |
| Alarm Output                |                        | VMD or Bilinx  |                                    |                       |  |
| Alarm Input(TTL)            |                        | Profile s<br>max.  | witching, +5 V no                  | ominal, +40 VDC       |  |
| Alarm Output Rel            | ay                     |  | VAC or +40 VDC<br>A continuous, 1  |                       |  |
| External Synchronal Input   |                        | 75 ohm 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  |                                    |                       |  |

| Model No.                 | Voltage Ra     | nge  | System        |
|---------------------------|----------------|--|---------------|
| Lens Types                |                | Manual, DC- and Video-Iris autooverride DC-iris drive: max $50  \text{r}$ Video-iris: $11.5 \pm 0.5  \text{VDC}$ , matinuous | mA continuous |
| Remote Control            |                | Bi-directional coaxial communi   | ication       |
| 1) F/1.2, 89% reflection  | n, SenseUp off |  |               |
| Mechanical                |                |  |               |
| Dimensions<br>(H x W x L) |                | 59 x 67x 122 mm<br>(2.28 x 2.6 x 4.8 inch)<br>without lens   |               |
| Weight                    |                | 450 g (0.99 lbs) without lens  |               |
| Tripod Mount              |                | Bottom (isolated) and top 1/4  | inch 20 UNC   |
| Lens Mount                |                | C and CS   |               |
| Controls                  |                | OSD with softkey operation   |               |
| Environmenta              | al             |  |               |
| Operating Tempe           | rature         | -20°C to +50°C (-4°F to +122°  | F)            |
| Storage Tempera           | ture           | -25°C to +70°C (-13°F to +158  | 3°F)          |
| Operating Humid           | ity            | 20% to 93% RH  |               |
| Storage Humidity          |                | up to 98% RH   |               |

| Ordering Information  |            |
|---|------------|
| LTC 0385/10 DinionXF Monochrome Camera<br>1/3-inch B/W high performance CCIR, DSP,<br>570 TVL, 12-28 VAC/11-39 VDC, 50 Hz | LTC0385/10 |
| LTC 0385/20 DinionXF Monochrome Camera<br>1/3-inch B/W high performance EIA, DSP,<br>570 TVL, 12-28 VAC/11-39 VDC, 60 Hz  | LTC0385/20 |
| LTC 0385/50 DinionXF Monochrome Camera<br>1/3-inch B/W high performance CCIR, DSP,<br>570 TVL, 85-265 VAC, 50 Hz          | LTC0385/50 |
| LTC 0385/60 DinionXF Monochrome Camera<br>1/3-inch B/W high performance EIA, DSP,<br>570 TVL, 85-265 VAC, 60 Hz           | LTC0385/60 |
| Accessories   |            |
| LTC 3364/21 Varifocal Lens IR corrected<br>1/3-inch, 2.8 – 6 mm, DC-iris, CS-mount<br>F1.4-200, 4-pin                     | LTC3364/21 |
| LTC 3364/31 Varifocal Lens<br>1/3-inch, 3.5 – 8 mm, DC-iris, CS-mount F/<br>1.4-200, 4-pin                                | LTC3364/31 |
| LTC 3364/40 Varifocal Lens<br>1/3-inch, 2.8 – 12 mm, DC-iris, CS-mount<br>F1.4-360, 4-pin                                 | LTC3364/40 |
| LTC 3364/60 Varifocal Lens<br>1/3-inch, 3.5 – 8 mm, DC-iris, CS-mount<br>F1.4-360, 4-pin                                  | LTC3364/60 |
| LTC 3374/20 Varifocal Lens<br>1/3-inch, 5 – 50 mm, DC-iris, CS-mount<br>F1.4-185, 4-pin                                   | LTC3374/20 |
|   |            |

| Ordering Information   |             |
|--|-------------|
| LTC 3384/21 Zoom Lens<br>1/3-inch, 6 – 60 mm, DC-iris, CS-mount<br>F1.4-360, 4-pin | LTC3384/21  |
| TC 120PS Power Supply Unit<br>110-120 VAC/15 VDC, 50/60 Hz, 300mA                  | TC120PS     |
| TC 220PS Power Supply Unit<br>230 VAC/12 VDC, 50 Hz, 10 VA                         | TC220PS     |
| TC 220PSX-24 Power Supply Unit<br>230 VAC/20 VAC, 50 Hz, 20 VA                     | TC220PSX-24 |
| TC 1334 Power Supply Unit<br>120 VAC/24 VAC, 60 Hz, 30 VA                          | TC1334      |
| Software Options   |             |
| VP-CFGSFT Configuration Software for cameras using Bilinx, includes VP-USB         | VP-CFGSFT   |

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