



Camera system

Series miniZoom, for use in hazardous areas



Ex camera miniZoom, stainless steel enclosure
Ex d IIB T6, Ex tD A21 IP67 T80°C, Ex II 2 G + D.

The VIDEOLUX miniZoom, equipped with state of the art technology, is the **smallest camera with zoom for hazardous areas currently available in its class**. Despite its small dimensions, the standard version is already equipped with a motorized 10 times zoom lens. This feature allows the user to set up the camera for a precise angle of vision or for a particular lighting situation. The miniZoom may be used for interior as well as for applications outside of buildings.

Thanks to the VISCA® communication protocol, the camera can not only be implemented into existing CCTV applications but for industrial picture processing as well. **This makes it a unique product on the market in its class.**

The VIDEOLUX miniZoom is certified for dust and gas hazardous areas according to the European Directive 94/9/EC (ATEX). The safety flameproof enclosures in stainless steel are designed pursuant to IP67. The borosilicate glass of the enclosure is scratch resistant and free from any optical distortion.

The allowed **ambient temperature** of use covers a wide range of applications: **From 0 °C to + 50°C in the standard version, or even from - 20 °C to + 50 °C with the optional integrated heating.**

In case of short distance into the hazardous area and / or for analog real-time applications the camera can be controlled and configured from a safe area by a control panel / joystick. The sequence may be displayed on a conventional screen with analog coaxial input (without PC).

The analog composite signal can be converted into a digital video stream using our **"Connection Rail"** which is available for safe and hazardous areas. The "Connection Rail" consists among other things of a video server, which is not only able to display the digital video stream but also to control the camera via a conventional PC. Simultaneous MPEG-4- and Motion JPEG video streams allow optimized picture quality and bandwidth usage of Ethernet networks.

Fixation systems:

- Tilting hinge ...Sch
- Flange collar ...R
- Wall and ceiling fixing system

Accessories:

- Sun protection roof
- Anti-dazzle shield ("baseball" cap)
- Supply cable
- Integrated heating
- Connection Rail



ARCORI Process Solutions Ltda

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REPRESENTANTE AUTORIZADO

MAX MÜLLER AG

Camera systems with state of the art technology!
Perfect, thoroughly engineered solutions from one hand!
Always an interesting, technically advanced idea ahead!

Technical data



Ex camera miniZoom, stainless steel enclosure, Ex d IIB T6, Ex tD A21 IP67 T80°C, Ex II 2 G + D, with wall fixing system.

ATEX certification according to Directive 94/9/EC:

- Ex II 2G (zones 1 and 2)
- Ex II 2D (zones 21 and 22)

Protection against explosions (gas hazardous areas):

- Ex d IIB T6 (standard version)
- Ex d IIC T6 (on demand)

Protection against explosions (dust hazardous areas):

Ex tD A21 IP67 T80°C

Allowed ambient temperature of use:

- 0 °C to + 50 °C (standard version)
- - 20 °C to + 50 °C (with integrated heating)

Enclosure protection degree: IP 67, dust and water jet tight to EN 60529 / DIN VDE 0470 part 1

Power consumption: Max. 2,5 W, with integrated heating max. 10 W

Power supply: 12 V DC to 30 V DC

Video-optical specifications:

¼" type EX-view HAD CCD sensor

Pixels PAL: 752(H) x 582 (V)

NTSC: 768(H) x 494 (V)

Horizontal resolution PAL: 460 TV lines

NTSC: 470 TV lines

Minimum lighting of object: 1,5 Lux

Signal / noise ratio: > 50 dB

Optical lens:

Optical zoom: 10 times, adjustable (additional digital zoom: 4 times)

Minimum distance lens/object: 10 mm (WIDE)

Focal length: f = 4,2 (WIDE) to 42,0 mm (TELE)

Horizontal angle of vision: 46° (WIDE) to 4,6° (TELE)

Video signal:

Analog composite signal through 75 Ohm coaxial cable

Control signal:

VISCA communication protocol through RS-422 interface

Dimensions (mm):

Ø79 x H 128 (without cable gland)

Do you wish for more information about our wide range of light fittings for use in hazardous and safe areas, about our range of circular sightglasses to DIN 28120/28121, screwed sightglasses similar to DIN 11851, rectangular or D-ended sightglasses, pipeline flow indicators, centrally or sideways operated wipers, hinged sightglasses, spraying devices or our complete sight and lightglass units VETROLUX®? Are you interested in other types, special versions or different protection degrees? If yes, please contact us, our branch office or our local agents – it is our business! You will find the necessary indications about our sales network on the Internet.

All dimensions in mm. Subject to changes without preliminary notice.



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Camera system

Series niteZoom, for use in hazardous areas



Ex camera niteZoom, stainless steel enclosure
Ex d IIB T6, Ex tD A21 IP67 T80°C, Ex II 2 G + D.

The VIDEOLUX niteZoom, equipped with state of the art technology, is the **smallest camera with zoom for hazardous areas currently available in its class**. Despite its small dimensions, the standard version is already equipped with a motorized 10 times zoom lens. This feature allows the user to set up the camera for a precise angle of vision or for a particular lighting situation. The niteZoom may be used for interior as well as for applications outside of buildings.

Thanks to the VISCA® communication protocol, the camera can not only be implemented into existing CCTV applications but for industrial picture processing as well. **This makes it a unique product on the market in its class.**

The VIDEOLUX niteZoom is certified for dust and gas hazardous areas according to the European Directive 94/9/EC (ATEX). The safety flameproof enclosures in stainless steel are designed pursuant to IP67. The borosilicate glass of the enclosure is scratch resistant and free from any optical distortion. The allowed **ambient temperature** of use covers a wide range of applications: From 0 °C to + 50°C in the standard version, or even from - 20 °C to + 50 °C with the optional integrated heating.

In case of short distance into the hazardous area and / or for analog real-time applications the camera may be controlled and configured from a safe area by a control panel / joystick. The sequence is displayed on a conventional screen with analog coaxial input (without PC).

The analog composite signal can be converted into a digital video stream using our "Connection Rail" which is available for safe and hazardous areas. The "Connection Rail" consists among other things of a video server, which is not only able to display the digital video stream but also to control the camera via a conventional PC. Simultaneous MPEG-4- and Motion JPEG video streams allow optimized picture quality and bandwidth usage of Ethernet networks.

1/3" Super HAD CCD-Sensor II

Excellent image quality, very high sensitivity, high resolution. The VIDEOLUX niteZoom with its newly-developed 1/3" Super HAD CCD II sensor offers significantly improved sensitivity and colour reproduction compared to other sensors. In addition, the camera can operate with a minimum illumination of 0,0004 Lux, resulting in a significantly improved image quality under limited lighting conditions. By combining a powerful DSP with this new CCD sensor, the camera achieves a high horizontal resolution of 530 TV lines.

Day/Night Function

The VIDEOLUX niteZoom features a day/night function, which provides for optimum sensitivity and image quality in both day and night shooting conditions. As soon as the illumination of the scene decreases below a set value, the infrared filter is automatically removed. The camera then switches to B&W mode, which enables it to operate under a minimum illumination of 0,0004 Lux (Auto ICR on).

Slow AE Response Function - Ideal for Abrupt Changes in Lighting Condition

The VIDEOLUX niteZoom camera is equipped with a „slow AE response“ function, which automatically adapts to abrupt changes in the lighting conditions. The rate may be set up to 32 times slower than when full-auto AE or priority (shutter/iris) modes are selected (standard settings). This function is essential for monitoring applications where lighting conditions may change rapidly.

Advanced Spherical Privacy Zone

In addition to conventional color masking, unwanted or prohibited areas within the image may be masked using a mosaic effect.



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Technical data



Ex camera niteZoom, stainless steel enclosure, Ex d IIB T6, Ex tD A21 IP67 T80°C, Ex II 2 G + D, with wall fixing system.

ATEX certification according to Directive 94/9/EC:

Ex II 2 G (zones 1 and 2), Ex II 2 D (zones 21 and 22)

Protection against explosions:

Gas: Ex d IIB T6 (standard version), Ex d IIC T6 (on demand)
Dust: Ex tD A21 IP67 T80°C

Allowed ambient temperature of use:

0 °C to + 50 °C (standard version), - 20 °C to + 50 °C (with integrated heating)

Enclosure protection degree: IP67, dust and water jet tight to EN60529/DIN VDE 0470 part 1

Power consumption: Max. 6,5 W, with integrated heating max. 10 W

Power supply: 12 V DC to 30 V DC (heating: 12 V DC to 24 V DC)

Reference power: 24 V DC

Power input: 270 - 540 mA, with integrated heating ca. 1000 mA

Video-optical specifications:

Sensor: 1/3" type Super HAD CCD II
Effective sensor resolution: ca. 752 x 582 (PAL), ca. 768 x 494 (NTSC)
Horizontal resolution: 530 TV lines wide end (PAL), 530 TV lines (NTSC)
Minimum lighting of object: 1/4 s, 1/3 s mode and ICR on: 0,0004 Lux
Signal / noise ratio: ≥ 50 dB

Optical lens:

Optical zoom: 10 times, adjustable (additional digital zoom: 12 times)
Minimum distance lens/object: 150 mm (WIDE), 800 mm (TELE)
Focal length: f = 5,1 (WIDE) to 51,0 mm (TELE)
Horizontal angle of vision: 52° (WIDE) to 5,4° (TELE)

Video signal: Analogue FBAS signal through 75 Ohm coaxial cable

Control signal: VISCA communication protocol through RS-422 interface

Electronic functions:
Electronic shutter control (ESC)
Back light compensation (BLC)
IR CUT filter (IRC)
Automatic white balance
Aperture correction (APC)
DSP

Dimensions (mm):

Ø79 x H 128 (without cable gland)

Fixation systems:
Tilting hinge ...Sch
Flange collar ...R
Wall and ceiling fixing system

Accessories:
Sun protection roof
Anti-dazzle shield ("baseball" cap)
Supply cable
Integrated heating
Connection Rail

All dimensions in mm. Subject to changes without preliminary notice.



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Camera system

Series Vario, for use in hazardous areas



Ex camera Vario, stainless steel enclosure
Ex d IIB T6, Ex tD A21 IP67 T80°C, Ex II 2 G + D.



Ex camera Vario, aluminium alloy enclosure, Ex d
IIC T6, Ex tD A21 IP67 T80°C, Ex II 2 G + D, with
wall fixing system.

The VIDEOLUX Vario, equipped with state of the art technology, is the **smallest varifocal camera for hazardous areas currently available in its class**. Despite its small dimensions, the standard version is already equipped with a varifocal lens and a DC iris. The VIDEOLUX Vario may be used for interior as well as for applications outside of buildings.

The VIDEOLUX Vario is certified for dust and gas hazardous areas according to the European Directive 94/9/EC (ATEX). The safety flameproof enclosure is available alternatively in stainless steel or in aluminum alloy casting. The enclosures are designed to IP67. The borosilicate glass of the enclosure is scratch resistant and free from any optical distortion. The allowed **ambient temperature of use from - 20 °C to + 50 °C** covers a wide range of applications.

Explosion proof camera with manually adjustable lens

With its manually adjustable lens, the VIDEOLUX Vario closes a product gap within our range of controllable industrial camera systems such as the VIDEOLUX miniZoom or the VIDEOLUX niteZoom. During installation, the camera once is adjusted to an object (zoom and focus). Thanks to the integrated DC iris and auto IR cut filter, the VIDEOLUX Vario is performing exceptionally well in changing lighting conditions.

1/3" Super HAD Interline Transfer CCD Sensor

Excellent image quality, very high sensitivity, high resolution. The VIDEOLUX Vario with its the newly-developed Super HAD CCD sensor offers significantly improved sensitivity and colour reproduction compared to other sensors. In addition, the camera can operate with a minimum illumination of 0.15 Lux, resulting in a significantly improved image quality under limited lighting conditions. By combining a powerful DSP with this new CCD sensor, the camera achieves a high horizontal resolution of 540 TV lines.

Day/Night Function

The VIDEOLUX Vario features a day/night function, which provides for optimum sensitivity and image quality in both day and night shooting conditions. As soon as the illumination of the scene decreases below a set value, the infrared filter is automatically removed. The camera then switches to B&W mode, which enables it to operate with a minimum illumination of 0.15 Lux (AGC-Turbo, B/W).



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Technical data



Ex camera Vario, aluminium alloy enclosure, Ex d IIC T6, Ex tD A21 IP67 T80°C, Ex II 2 G + D.



Ex camera Vario, stainless steel enclosure, Ex d IIB T6, Ex tD A21 IP67 T80°C, Ex II 2 G + D, with wall fixing system.

ATEX certification according to Directive 94/9/EC:

Ex II 2 G (zones 1 and 2), Ex II 2 D (zones 21 and 22)

Protection against explosions:

Gas: Ex d IIB T6 (standard version), Ex d IIC T6 (on demand)
Dust: Ex tD A21 IP67 T80°C

Allowed ambient temperature of use:

- 20 °C to + 50 °C

Enclosure protection degree: IP 67, dust and water jet tight to EN 60529 / DIN VDE 0470 part 1

Power consumption: Max. 6,5 W

Power supply: 12 V DC to 30 V DC

Reference power: 24 V DC

Power input: Ca. 530 mA

Video-optical specifications:

Sensor: 1/3" CCD Sony Super HAD Interline Transfer
Effective sensor resolution: PAL: 440.000 pixels (ca. 752 x 582)
Horizontal resolution: 540 TV lines
Minimum lighting of object: 0,15 Lux
Recommended lighting: 0,5 - 100.000 Lux
Signal / noise ratio: 48 dB

Optical lens:

Optical: Varifocal
Minimum distance lens/object: 150 mm
Focal length: f = 3,8 (WIDE) to 9,5 mm (TELE)
Horizontal angle of vision: 74,2° (WIDE) to 30° (TELE)

Electronic functions:

DC iris control
Electronic shutter control (ESC)
Digital signal processing (DSP)
Back light compensation (BLC)
Automatic white balance (ATW)
Removable IR CUT filter (ICR)
Automatic gain control (AGC)
FBAS (VBS) video output: 1 Vpp

Dimensions (mm):

Aluminium enclosure: Ø100 x H 163 (without cable gland)
Stainless steel enclosure: Ø79 x H 128 (without cable gland)

Fixation systems:

Tilting hinge ...Sch (for stainless steel version)
Flange collar ...R (for aluminium and stainless steel version)
Fixation bracket ...W (for aluminium version)
Side feet ...X1 (for aluminium version)
Wall and ceiling fixing system (in aluminium alloy or stainless steel)

Accessories:

Sun protection roof
Anti-dazzle shield ("baseball" cap)
Supply cable
Connection Rail

All dimensions in mm. Subject to changes without preliminary notice.