



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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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 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 EN 60529 / 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