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ALFATRON ELECTRONICS GmbH GERMANY

ALF-20X-NDIC Full HD PTZ Camera

User Manual



The ALF-20X-NDIC is a Full HD PTZ camera with a 20x Zoom lens. The features include advanced ISP processing algorithms to provide vivid images with a strong sense of depth, high resolution, and fantastic color rendition. It supports H.264/H.265 encoding which makes motion video fluent and clear even under less than ideal bandwidth conditions.

Key Features

- **Superb High-definition Image**

1/2.8-inch-high quality CMOS sensor. Resolution is up to 1920x1080 with frame rate up to 60fps.

- **Lens**

20X optical zoom, with wide viewing angle of 54.7 °free distortion.

- **Trinity image auto focus technology**

With image intelligent processing, provide auto white balance (AWB), auto exposure (AE), auto focus (AF) functions, fully automatically adapt to the environment, achieve the best image effect, and achieve the perfect Trinity image auto adjustment.

- **Multiple Video Output Interfaces**

Supports HDMI, SDI, LAN. SDI supports 100m transmission in 1080p60 format.

- **Leading Auto Focus Technology**

Leading auto focus algorithm makes lens a fast, accurate and stable auto-focusing.

- **Low Noise and High SNR**

Low Noise CMOS effectively ensure high SNR of camera video. Advanced 2D/3D noise reduction technology is also used to further reduce the noise, while ensuring image sharpness.

- **Audio Input Interface (for future development)**

Support 8000, 16000, 32000, 44100, 48000

sampling frequency and AAC, MP3, G.711A audio coding.

- **Wide-range, Quiet and Quick Pan/Tilt Mechanism**

By adopting step driving motor mechanism, ALF-20X-NDIC camera works extremely quiet and moves smoothly.

- **Multiple Audio/Video Compression**

Support H.264/H.265 video compression; AAC, MP3 and G.711A audio compression; Support compression of resolution up to 1920x1080 with frame up to 60fps.

- **Multiple Network Protocol**

Support ONVIF, RTSP, RTMP, GB/T28181, NDI protocols and support RTMP push mode, easy to link streaming media server (Wowza, FMS). Supports RTP multicast mode and visca control protocol of network full command.

- **Control interfaces: RS485, RS232.**

RS232 support Cascade, good for installation.

- **Wide Application**

Tele-education, Lecture Capture, Webcasting, Videoconferencing, Tele-training, Tele-medicine, Interrogation and Emergency command systems.

- **Low-power Sleep Function**

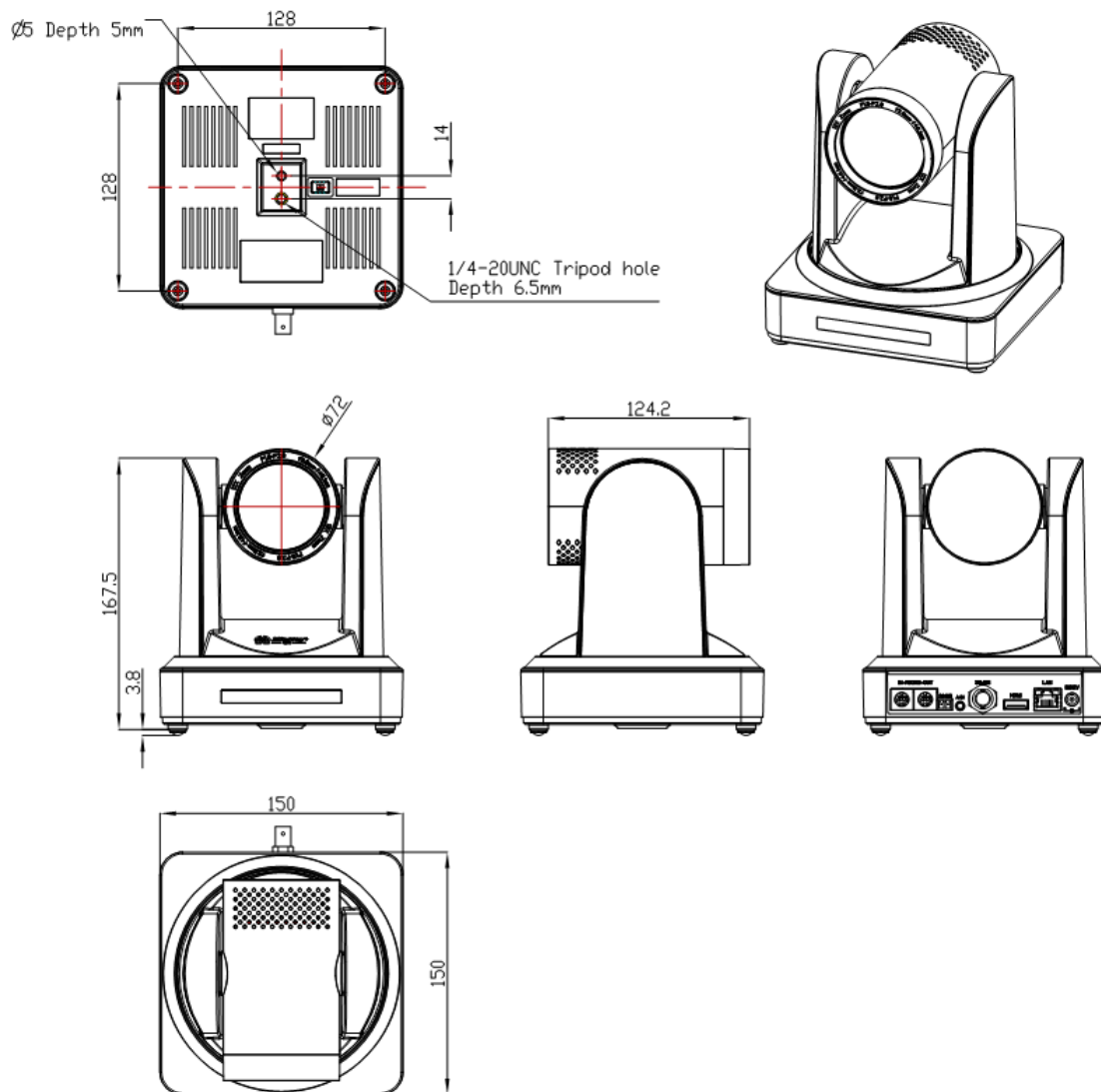
Support low-power sleep/wake up, the consumption is lower than 400mW under sleep mode.

Technical Specification

| | | |
|-------------------------------|---|--|
| Model | ALF-20X-NDIC | |
| Camera Parameter | | |
| Optical Zoom | 20X f=5.5~110mm | |
| Sensor | 1/2.8-inch-high quality HD CMOS sensor | |
| Effective Pixels | 16: 9, 2.07 megapixel | |
| Video Format | HDMI/SDI video format 1080P60/50/30/25/59.94/29.97; 1080I60/50/59.94; 720P60/50/30/25/59.94/29.97 | |
| View Angle | 3.3°(tele) 54.7°(wide) | |
| AV | F1.6 – F3.5 | |
| Digital Zoom | 10X | |
| Minimum Illumination | 0.1Lux | |
| DNR | 2D & 3D DNR | |
| White Balance | Auto / Manual/ One Push/ 3000K/ 4000K/5000K/6500K | |
| Focus | Auto/Manual/One key focus | |
| Aperture/Electronic Shutter | Auto/Manual | |
| BLC | ON/OFF | |
| WDR | OFF/ Dynamic level adjustment | |
| Video Adjustment | Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma curve | |
| SNR | >55dB | |
| Input/output Interface | | |
| Video Interfaces | SDI, HDMI, LAN (NDI & POE), RS232 (In & Out), RS485, A-IN | |
| Video output interface | HDMI, SDI, LAN, | |

| | |
|------------------------|--|
| Video Compression | H.264, H.265, Dual stream output |
| Control Protocol | VISCA/Pelco-D/Pelco-P; Baud Rate:115200/9600/4800/2400bps |
| Audio Input Interface | A-IN: Double track 3.5mm linear input; |
| Audio Compression | AAC/MP3/G.711A Audio compression |
| HD IP Interface | 100M IP Port(10/100BASE-TX); Support VISCA protocol control through IP port. |
| Network Protocol | RTSP, RTMP, ONVIF, GB/T28181, NDI |
| Power Interface | HEC3800 Outlet (DC12V) |
| Supply Adapter | AC110V-AC220V to DC12V/1.5A |
| Input Voltage | DC12V±10% |
| Input current | 1A (Max) |
| Consumption | 12W (Max) |
| PTZ Parameter | |
| Pan/Tilt Rotation | ±170°, -30°~+90° |
| Pan Control Speed | 0.1 -60°/sec |
| Tilt Control Speed | 0.1-30°/sec |
| Preset Speed | Pan: 60°/sec, Tilt: 30°/sec |
| Preset Number | 255 presets (10 presets by remote controller) |
| Other Parameter | |
| Storage temperature | -10°C~+60°C |
| Storage humidity | 20%~95% |
| Working temperature | -10°C~+50°C |
| Working humidity | 20%~80% |
| Dimension | 150mmX150mmX167.5mm |
| Weight | 1.4KG |
| Remote Operation (IP) | Remote Upgrade, Reboot and Reset |
| Accessories | |
| Accessories | 12V/1.5A power supply, RS232 cable, remote control, manual, warranty card |
| Included accessories | Wall mount |

Dimension(mm):



Warranty

Limited warranty in respect of Alfatron Products Only

1.1 This limited warranty covers defects in materials and workmanship in this product.

1.2 Should warranty service be required, proof of purchase must be presented to the Company. The serial number on the product must be clearly visible and not have been tampered with in any way whatsoever.

1.3 This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or

malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by the Company to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product. This limited warranty does not cover equipment enclosures, cables or accessories used in conjunction with this product.

This limited warranty does not cover the cost of normal maintenance. Failure of the product due to insufficient or improper maintenance is not covered.

1.4 The Company does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.

1.5 Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product.

1.6 Unless otherwise specified, the goods are warranted in accordance with the manufacturer's product specific warranties against any defect attributable to faulty workmanship or materials, fair wear and tear being excluded.

1.7 This limited warranty only covers the cost of faulty goods and does not include the cost of labor and travel to return the goods to the Company's premises.

1.8 In the event of any improper maintenance, repair or service being carried out by any third persons during the warranty period without the Company's written authorization, the limited warranty shall be void.

1.9 A 7 (seven) year limited warranty is given on the aforesaid product where used correctly according to the Company's instructions, and only with the use of the Company's components.

1.10 The Company will, at its sole option, provide one of the following three remedies to whatever extent it shall deem necessary to satisfy a proper claim under this limited warranty:

1.10.1 Elect to repair or facilitate the repair of any defective parts within a reasonable period of time, free of any charge for the necessary parts and labor to complete the repair and restore this product to its proper operating condition.; or

1.10.2 Replace this product with a direct replacement or with a similar product deemed by the Company to perform substantially the same function as the original product; or

1.10.3 Issue a refund of the original purchase price less depreciation to be determined based on the age of the product at the time remedy is sought under this limited warranty.

1.11 The Company is not obligated to provide the Customer with a substitute unit during the limited warranty period or at any time thereafter.

1.12 If this product is returned to the Company this product must be insured during shipment, with the insurance and shipping charges prepaid by the Customer. If this product is returned uninsured, the Customer assumes all risks of loss or damage during shipment. The Company will not be responsible for any costs related to the removal or re-installation of this product from or into any installation. The Company will not be

responsible for any costs related to any setting up this product, any adjustment of user controls or any programming required for a specific installation of this product.

1.13 Please be aware that the Company's products and components have not been tested with competitor's products and therefore the Company cannot warrant products and/or components used in conjunction with competitor's products.

1.14 The appropriateness of the goods for the purpose intended is only warranted to the extent that the goods are used in accordance with the Company's installation, classification and usage instructions.

1.15 Any claim by the Customer which is based on any defect in the quality or condition of the goods or their failure to correspond with specification shall be notified in writing to the Company within 7 days of delivery or (where the defect or failure was not apparent on reasonable inspection by the Customer) within a reasonable time after discovery of the defect or failure, but, in any event, within 6 months of delivery.

1.16 If delivery is not refused, and the Customer does not notify the Company accordingly, the Customer may not reject the goods and the Company shall have no liability and the Customer shall pay the price as if the goods had been delivered in accordance with the Agreement.

1.17 THE MAXIMUM LIABILITY OF THE COMPANY UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PRODUCT