VOCORD NetCam4 «Machine vision» IP Video Camera

Description

The new generation of VOCORD NetCam4 high definition video cameras is developed specifically for use in facial recognition and license plate recognition systems and for other video analysis tasks, which require high image quality in varying light conditions.

The VOCORD NetCam4 cameras are equipped with a wide range of CCD and CMOS video sensors with high light sensitivity, low inherent noise and “Global Shutter” central shutter technology. The cameras implement integrated control of motorized lenses: automatically or manually via the web-based interface.

The VOCORD NetCam4 cameras transmit two or more independent video streams with total capacity of up to 2 Gb/s.

VOCORD
VIDEO SURVEILLANCE AND
AUDIO RECORDING SYSTEMS

Features

- Video in MJPEG, RAW formats
- Support for DC Drive and P-Iris type automatic aperture regulation
- Support for motorized lenses
- Automatic adjustment mode to different lighting conditions and character of the scene
- Optimization of image quality via adaptive adjustment of the parameters of the video sensor and camera lens, adjustment of image processing
- Group time synchronization of multiple cameras, synchronization with external sources
- Connection of additional equipment via the RS-232C interface
- Management of relay outputs and the connected actuators
- Video transmission via Ethernet network
- Internal video stream buffering for quality transmission maintenance in loaded IP networks
- Support for full-featured remote access
- Built-in web-server for remote camera management and configuration, image viewing and actuator management via web-based interface.
- Delimitation of camera access rights via web-based interface

Technical specifications

Lens	
Support for motorized lenses	+
Support for DC Drive type automatic aperture regulation	+
Support for P-Iris type automatic aperture regulation	+
Lens mounting	- CS-mount; - C-mount (via adapter)
Video	
Video streaming	MJPEG, RAW
RAW-stream capacity, bytes / pixel	8, 10, 12
Network interface	
Ethernet interface	Gigabit Ethernet 1000BASE-T
Number of ports, units	2
PoE support (power supply via Ethernet)	1 interface

Interfaces for connection of additional equipment	
RS-232C interface, units	2
Interfaces for synchronization and control of external devices	- 2 inputs (with galvanic isolation); - 3 outputs (with galvanic isolation); - Synchronization capacity via the AC24V power supply input
Relay outputs for management of external devices (including wiper, screen washer)	- Normally Open (NO) — 2 outputs; - Normally Closed (NC) — 1 outputs
Control	
Web-interface	+
Auto-adjustment to shooting conditions	Available, adjustment is supported in the following conditions: - in rooms meant for facial recognition; - on the street for license plate recognition; - in the event of substantial contrast between the subject and background, including back light; - using the parameters set by the user
Exposure auto adjustment: exposure time and aperture	Available, the following modes are supported: - normal mode; - backlight compensation; - deep shadow compensation; - automatic mode change
Adaptive conversion of image pixel depth	Available, the following methods are supported: - histogram normalization; - brightness correction
Auto WB (for color cameras)	+
User aperture control (DC Drive)	+
Amplification adjustment	+
MJPEG video compression tuning	+
Temporal synchronization with other devices	+
Power supply	
Power supply voltage, V: - input DC12V - input AC24V	from 7 to 20 (DC) from 21 to 42 (AC) or from 21 to 56 (DC)
Power source: - DC - AC	12 V -15/+10 %, 2 A 24 V -15/+10 %, 1 A
PoE	IEEE 802.3af, class 3 (up to 12,8 W)
Power consumption (without lens), W	from 7 to 12
Weight and dimension parameters	
Dimensions W×D×H (without lens), mm	65×70×145
Weight (without lens), kg, no more than	0,63
Reliability indicators	
Service life of product and warehouse storage life of product in manufacturers packaging, years	5

Technical specifications of the models

The wide model range of VOCORD NetCam4 is represented by black and white and color cameras with a sensor size of 1.4 megapixels to 4.1 megapixels and with a frame rate of 20 to 52 frames per second. This allows for a camera to be selected for virtually any wide analytics task. For license plate recognition systems, the use of black and white cameras with sensor size 2.8 MP (2 lanes) or 4.1 megapixel (4 lanes) is recommended. Technical characteristics of the most popular models are shown in the table below:

Parameter	Model range*			
	D14M20SA	**D20M33SA**	**D28M25SA**	**D41M25SA**
Video sensor resolution, megapixels	1,4	2,0	2,8	4,1
Video sensor type	CCD interline	CCD interline	CCD interline	CCD interline
Number of pixels in video sensors (width × height), pixels	1392 × 1040	1920 × 1080	1936 × 1456	2336 × 1752
Color rendering	B/W	B/W	B/W	B/W
Frame rate at full resolution, frames/second	20	33	25	25
Analog-to-digital converter capacity, bytes, no less than	12	12	12	12
Image sensor dynamic range (EMVA-1288 standard), dB, no less than	66	60	63	60
Signal-to-noise video sensor characteristic for maximum signal (EMVA-1288 standard), dB, no less than	42	42	41	42
Spectral range**, nm	400...640	400...640	400...640	400...640
Sensor size, inches	2/3	2/3	1/1,8”	1

** — The presented models of monochrome cameras may be equipped with a movable optical filter depending on their modifications, in which case a DN index is added to the camera nomenclature, for example D14M20SA-DN. Also depending on camera modification, some models may have an optical filter, in which case an RF-index is added to the camera nomenclature, for example D14M20SA-RF.*

*** — For camera modifications with RF-index, the spectral range is 400...1000 nm.*

Do you want to know more?

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