LOGIPIX

LOGIPIX ONE 20 MP DAY/NIGHT/IR – 01

The Logipix ONE 20 MP camera was designed to fulfill special requirements. It can cover vast areas and can operate in different lighting conditions.

Thanks to the 1" sensor, the camera has excellent low-light performance, high sensitivity and a resolution that one finds in professional DSLR cameras. The Logipix ONE 20 MP camera produces a 20 FPS video stream at full resolution, therefore any motion in the footage seems continuous. The device uses the visually lossless JPEG2000 wavelet-based compression method, compressing each frame separately. The video stream does not contain predicted frames.

With the high frame rate video stream object tracking and video content analysis can be accurate. With its optional IR Flash the camera is capable of offering sharp and detailed images of the monitored objects even in extreme situations, when only infrared light is useful during the observation.

KEY FEATURES

- 1" size, CMOS image sensor with extra high-sensitivity
- 20 MP resolution
- 20 FPS at full resolution
- Wide Dynamic Range
- Optional external synchronized IR Flash
- Optional radar for speed measurement
- Wavelet-based, visually lossless JPEG2000 compression

- Triple optical filters for different operation modes (IR band suppressed/All band enabled/IR bandpass)
- Automatic switching between Day/Night/IR modes
- Automatic Back Focus
- 1 Gbit LPoE Ethernet port
- 4 external, programmable I/O
- SD slot for firmware update

RESOLUTION SPECIFICATION

Face recognition (Automatic identification) distance	600 ppm	35 m (LOBJ36 @ 50 mm)
License plate recognition (Automatic) distance	350 ppm	60 m (LOBJ36 @ 50 mm)
Face recognition (Identification by operator) distance	250 ppm	82 m (LOBJ36 @ 50 mm)
Human detection (Detection by operator) distance	25 ppm	820 m (LOBJ36 @ 50 mm)

SPECIALLY DEVELOPED FUNCTIONS IN THE LOGIPIX CONTROL CENTER

Zone violation detection and immediate alarm (in cooperation with a VCA LNVR)

Abandoned object detection and immediate alarm (in cooperation with a VCA LNVR)

Detecting suspicious behaviors and immediate alarm (in cooperation with a VCA LNVR)

Individually compressed frames

Special picture enhancement algorithm for foggy, rainy weather conditions

Real-time camera image stitching to create a panoramic view in case of monitoring large areas, displaying in live and archive mode, zooming as if it were a single image

Remote focus configuration (ABF)

High Dynamic Range (HDR) technology to have visual information in both dark and bright areas in the same image

SPECIFICATIONS

TECHNICAL SPECIFICATION

Part number	LPIX20-ONE-DNI-02	
Description	Logipix One 20 Megapixel, 1" IP camera with ABF and 3 optikcal filter D/N/IR 808nm (w/o lens)	
Function	Day - IR band suppressed	
	Night - All band enabled	
	IR - IR bandpass filter for IR Flash, 808nm	
Sensor Resolution	5504 (H) x 3648 (V)	
Frame rate	20 fps @ 20 MP	
Video compression	JPEG2000 - Wavelet	
	MPX24 Signal Processor	
Image sensor	1" color 20 Megapixel CMOS	
Auto focus	Motorized back focus adjustment	
Scanning system	Progressive, no interlaced scanning	
Shutter type	Electronic rolling shutter (ERS)	
Shutter mode	1/10 - 1/20 000 s, 1/1 s low shutter mode	
Sensitivity	0.02 lux F1.4 Day mode or 0.002 lux F1.4 Night mode	
Gain control	Fix, auto, blur or noise priority	
Backlight compensation	Whole picture or any area selectable	
Lens	Standard C mount DC auto/manual IRIS, P-IRIS lens	
Inputs/Outputs	4 programmable IO connections NO, NC / OC 0.5 A/30 V	
Sound	Built-in microphone, 1 ch external 24 kHz/16 bit, sound in/output	
Firmware update	SD card or Network	
Intelligence	Integrated motion detection	
	Video Content Analysis — Optional	
Ethernet connection	1 Gbit / Low Voltage Power over Ethetnet (LPoE)	
Network security	1500 bit public-key RSA; User authentication	
Approvals	EN 55032:2015/AC:2016, EN 61000-3-2:2014, EN 61000-3-3:2013,	
	EN 50130-4:2011/A1:2015, IEC/EN 60529 IP66, IEC 60950-1	

ELECTRICAL SPECIFICATION

Power supply	LPoE or 10-24 V DC
Power consumption	7.2 W
Operating temperature	-10 °C to + 50 °C (14 °F to +122 °F)
Storage temperature	-10 °C to + 50 °C (14 °F to +122 °F)
Humidity	0 - 90% non-condensing

MECHANICAL SPECIFICATION

Material	Full metal housing
Weight	315 g (without lens)
Dimensions (W × D × H)	53 × 73 × 66 mm (without lens)
Package gross weight	330 g
Package dimensions (W × D × H)	68 × 96 × 75 mm
Master carton gross weight	4 670 g
Master carton dimensions (W × D × H)	340 × 315 × 135 mm
Pieces / master carton	12 pcs

RELATED COMPONENTS

Logipix NVR

Part number	Description
LNVR4-10-16	LNVR 4th gen. 6U x 350 mm x 19" rack, 1x10GBit SFP+ for cameras, 1x10GBit SFP+ and 1x1Gbit for remote monitoring, 16 hot-swap SATA HDD bay
LNVR4-SE-16	LNVR 4th Storage Extender 6Ux 350 mmx19" rack, 2x10 GBit SFP+ for NVR, 16 hot-swap SATA HDD bay
LNVR4-4-4-O-02	Logipix 4th Outdoor NVR for 4 pcs of Logipix ONE cameras
LNVR4-8-16-I	Logipix 4th NVR with VCA license, 4+4 cameras, 16 hot-swap SATA HDD bay
LNVR4-8-8-I	Logipix 4th NVR with VCA license, 4+4 cameras, 8 hot-swap SATA HDD bay

Logipix IR FLASH

Part number	Description
LPIX-IRF-02	Logipix Varifocal 500W IR Laser Flash for LPIX20-ONE-DNI-02

Logipix RADAR

Part number	Description
LPIX-RAD-02	Logipix 3D multi-lane Radar 76-81GHz

Logipix LENS

Part number	Focus	F	Iris	Mount
LOBJ-14	75 mm	2.8	Manual	C
LOBJ-31	35 mm	1.4	Manual	C
LOBJ-32	70 – 200 mm	2.8	P-Iris	C
LOBJ-36	14 – 50 mm	2.8	Motorized P-Iris	C
LOBJ-38	8 mm	1.4	Manual	C
LOBJ-39	170 mm	2.6	P-Iris	C
LOBJ-40	70 mm	2.6	Manual	C
LOBJ-41	32-80 mm	2.6	P-Iris	C

Logipix SOFTWARE

Part number	Description
SDB08-CC+	Logipix Control Center Professional
SDB08-CCU	Logipix Control Center Ultimate

APPLICATION AREAS

Logipix ONE 20 MP camera is one of the key components of the end-to-end Logipix surveillance solutions.

- **Traffic Violation Management solution**
- **Stadium Video Surveillance solution**
- **Safe and Smart City solution**
- **City Video Surveillance solution**

- **Airport Video Monitoring solution**
- **Border Surveillance solution**
- **Critical Infrastructure Video Surveillance solution**

DIMENSIONS (all values are in mm)