



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

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-01 |
| Description | Logipix One 20 Megapixel, 1" IP camera with ABF and 3 optical filter D/N/IR 850nm (w/o lens) |
| Function | Day - IR band suppressed Night - All band enabled IR - IR bandpass filter for IR Flash, 850nm |
| 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 |
| Intelligence | Integrated motion detection Video Content Analysis — Optional |
| Ethernet connection | 1 Gbit / Low Voltage Power over Ethernet (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 4 th Storage Extender 6Ux 350 mmx19" rack, 2x10 Gbit SFP+ for NVR, 16 hot-swap SATA HDD bay |
| LNVR4-4-4-O-02 | Logipix 4 th Outdoor NVR for 4 pcs of Logipix ONE cameras |
| LNVR4-8-16-I | Logipix 4 th NVR with VCA license, 4+4 cameras, 16 hot-swap SATA HDD bay |
| LNVR4-8-8-I | Logipix 4 th NVR with VCA license, 4+4 cameras, 8 hot-swap SATA HDD bay |

Logipix IR FLASH

| Part number | Description |
|-------------|-------------------------------------------------------------|
| LPIX-IRF-01 | Logipix Varifocal 100W IR Laser Flash for LPIX20-ONE-DNI-01 |

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)

