The SensorTec 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 SensorTec 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 IR Laser Flash the camera is capable of offering sharp and detailed images of both reflective and non-reflective license plates, when monitoring the traffic at night.

**Features**

- 1” size, CMOS image sensor with extra high-sensitivity
- 20 MP resolution
- 20 FPS at full resolution
- Wide Dynamic Range
- External synchronized IR Flash
- 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**

<table>
<thead>
<tr>
<th>Face recognition (Automatic identification) distance</th>
<th>35 m @ 50mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>License plate recognition (Automatic) distance</td>
<td>60 m @ 50mm</td>
</tr>
<tr>
<td>Face recognition (Identification by operator) distance</td>
<td>82 m @ 50 mm</td>
</tr>
<tr>
<td>Human detection (Detection by operator) distance</td>
<td>820 m @ 50 mm</td>
</tr>
</tbody>
</table>

**SPECIALY DEVELOPED FUNCTIONS IN THE SENSORTEC CONTROL CENTER**

- Zone violation detection and immediate alarm (in cooperation with a VCA NVR)
- Abandoned object detection and immediate alarm (in cooperation with a VCA NVR)
- Detecting suspicious behaviors and immediate alarm (in cooperation with a VCA NVR)
- 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 ar-chive mode, zooming as if it were a single image
- Remote focus configuration (ABF)
- Dual-shutter and wide dynamic range to efficiently display sunlit and low-lit areas in an image

**TECHNICAL SPECIFICATION**

<table>
<thead>
<tr>
<th>Description</th>
<th>Multi-megapixel Auto Back Focus IP camera with 1” sensor and 3 optical filters for automatic Day/Night/IR switching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function</td>
<td>Day: IR band suppressed</td>
</tr>
<tr>
<td></td>
<td>Night: All band enabled</td>
</tr>
<tr>
<td></td>
<td>IR: IR bandpass filter for IR Flash, 808nm Infrared Laser correction</td>
</tr>
<tr>
<td>Sensor Resolution</td>
<td>5504 (H) x 3648 (V)</td>
</tr>
<tr>
<td>Frame rate</td>
<td>20 fps @ 20 MP</td>
</tr>
<tr>
<td>Video compression</td>
<td>JPEG2000 - Wavelet</td>
</tr>
<tr>
<td></td>
<td>MPX24 Signal Processor</td>
</tr>
<tr>
<td>Image sensor</td>
<td>1” color 20 Megapixel CMOS</td>
</tr>
<tr>
<td>Auto focus</td>
<td>Motorized back focus adjustment</td>
</tr>
<tr>
<td>Scanning system</td>
<td>Progressive, no interlaced scanning</td>
</tr>
</tbody>
</table>
## RESOLUTION SPECIFICATION

- **Face recognition (Automatic identification)** distance: 35 m @ 50mm
- **License plate recognition (Automatic)** distance: 60 m @ 50 mm
- **Face recognition (Identification by operator)** distance: 82 m @ 50 mm
- **Human detection (Detection by operator)** distance: 820 m @ 50 mm

## TECHNICAL SPECIFICATION

### Description
- Multi-megapixel Auto Back Focus IP camera with 1" sensor and 3 optical filters for automatic Day/Night/IR switching

### Function
- **Day**: IR band suppressed
- **Night**: All band enabled
- **IR**: IR bandpass filter for IR Flash, 808nm Infrared Laser correction

### 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 0.5A/30V

### Sound
- Built-in microphone, 1 ch external 24 kHz/16bit, sound in/output

### Intelligence
- Integrated motion detection

### Ethernet connection
- 1 Gbit / Low Voltage Power over Ethetnet (LPoE)

## ELECTRICAL SPECIFICATION

### Power supply
- LPoE or 10-24 V DC

### Power consumption
- 7.2 W

### Operating temperature
- -10 °C to + 65 °C

### Storage temperature
- -10 °C to + 65 °C

### 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