





### SENSORTEC 20 MP DAY/NIGHT/IR

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
- 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





# ST\_IP20MP\_R

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	

#### SPECIALLY 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		
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	



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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 ( $W \times D \times H$ )	68 × 96 × 75 mm	