SensorTec

ST-P80TLR-U75

Panoramic Multisensor Tracking Camera

Features:

- Based on the thermal and visible panoramic camera the system detects and tracks multiple target.
- Based on user settings the dual sensor PTZ follows one or multiple targets:
  - Object is closer to defended area
  - Object is moving faster toward the defended area
  - Latest object movement
  - Higher ranked object type (small animal, big animal, small vehicle, big vehicle)
  - Single object lock, automatic switching between objects
- The dual sensor camera could provide higher detail image of the tracked objects, than the panoramic camera could provide.
- The operator could direct the dual sensor camera out of the panoramic coverage so any area could be checked around the installation point.
- The operator could drive the dual sensor PTZ by selecting any area on the panoramic view.
- The actual covered area of panoramic and PTZ camera is displayed on the map window.

Panoramic Camera Module

Resolution Specification (installation heightt 10m)		
Covered area	From 30 m to 8,860 m (8 ppm)	
Human detection (Detection by operator) distance	23 ppm	3000 m
Light vehicle detection (Detection by operator) distance	12 ppm	5900 m
Heavy vehicle detection (Detection by operator) distance	8 ppm	8860 m

Technical Specification	
Description	Multi-megapixel Auto Back Focus IP camera with 4 pieces of 1” sensor and ICR function for Day/Night switching in weatherproof house with self-cleaning sys-tem with Thermal camera extension
Resolution for visible camera	80 Megapixel
Resolution for thermal	2560x1024 pixel
Frame rate	20 fps at full resolution
Video compression	JPEG2000 - Wavelet
Compression engine	MPX24 Signal Processor
Image sensor	1” WDR 20.48 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
Field of View	Horizontal: 8° Vertical: 22.5°
Inputs/Outputs	1 programmable IO connections
Intelligence	Integrated motion detection - Video Content AnAnalysis Optional
Ethernet connectionEthernet connection	10 Gbps SFP+ socket
Network security	1500 bit public-key RSA; User authentication
Cooling system	Passive heatpipe

Technical Specification	
Heating system	Active automatic – optional
Cooling system	Wiper with washer, fluid pump and internal tank
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
Thermal Sensor	
Image sensor	Uncooled Amorphous Silicon (a-Si) microbolometer
Sensor resolution	2560 x 1024 pixel @ 20 FPS
Detector pitch	12 µm
Spectral response	8 - 14 µm
Non-conformity correction	1 point with shutter or through lens
Thermal Processing	
Automatic Gain and level	User defined, persistent through power cycles
Digital zoom & pan	Region of interest; 1x – 4x
Picture inversion	Positive / Negative
Image Mirroring	Horizontal and Vertical image flip
Image control	Image contrast enhancement Black & White polarity Color tables
Symbology	256 grayscale and 256 colors
Mechanical Specification	
Material	User defined, persistent through power cycles
Digital zoom & pan	Region of interest; 1x – 4x
Picture inversion	Positive / Negative
Image Mirroring	Horizontal and Vertical image flip
Image control	Image contrast enhancement Black & White polarity Color tables
Symbology	256 grayscale and 256 colors

Multi-sensor Camera Module

Technical Specification	
Sensor	UFPA, 7-14um spectral response
Resolution	640*512
Spectral Response	7 - 14μm
NETD	40mK (@25+45°C) F4.0
Pixel Size	17um
FOV	24° × 18° ~ 8° × 6°
Spatial resolution	0.68 ~ 0.22 mrad
Image Processing	Image enhancement: SDE; Color: White hot/Black hot; Digital zoom: 2X, 4X Correction: Integrated internal NUC, external optical NUC Brightness and contrast: AGC, adjustable
Frame Rate	30 FPS
Automatic defrosting of the outer lens	Yes
Frequency	30 Hz
Thermal Lens	
Lens Type	Motorized
Focus Control	Auto / Manual
Focal Length	25 ~ 75mm - 3X optic zoom
Detection (2.3m * 2.3m)	6,500 m
Recognition(2.3m * 2.3m)	2,500 m
Identification (2.3m * 2.3m)	1,200 m
Detection (1.8m * 0.6m)	1,800 m
Recognition (1.8m * 0.6m)	1,000 m
Identification (1.8m * 0.6m)	4,70 m
Visible Camera	
Sensor	1/2.8’ CMOS auto color to B/W CMOS
Resolution	1920*1080 2.1 mega pixels
Lens	8-320 mm, 40X zoom lens
Focus Control	Auto / Manual
Preset	255
Day/Night Mode	Auto, colour, monochrome
Laser Illuminator	10W laser consumption

Pan/Tilt	
Load	20 kg
Range	Pan 0 ~ 360 °, Tilt -45° ~ + 90 °
Speed	Pan 0.001°/ S ~ 80°/s Tilt 0.001 °/ S ~ 80°/ S
Precision	0.02°
Preset	255
Auto Tracking	Support
Gyro Stabilization	Support
Material	Aluminium
Communication protocol	IP
Housing	
Material	Integral aluminum alloy
Structure	Integral double window
Connector	Waterproof aviation connector
Ingress Protection	IP66
Interface	
Network	1 way RJ45, 10/100 Base-T adaptive
Communication protocol	Ethernet and RS-422
Video	Analog composite (PAL o NTSC) Digital (IP video stream H264, ONVIF)
Protocol	Support TCP/IP, UDP, IPv4/v6; support HTTP, RTP, RTSP, NFS, DHCP, NTP, ONVIF 2.0
Physical interface	Alloy waterproof aviation plug

Panoramic Multisensor Tracking Camera

Environmental Specification	
Operating temperature	-40 °C to +65 °C
Storage temperature	40 °C to +65 °C
Weight	34 Kg
Humidity	less than 95%

SensorTec

sales@sensortec-eu.com

www.sensortec-eu.com

Sydney House, 62 Lancaster Way,
Ely, Cambridgeshire, CB6 3NW,
UK.