Accurate Sensors Technologies

Most Economic Online Thermal Camera

AST-LTE-80

Thermal imaging camera offers a broad range of applications across a number of different industries from automotive industry to fire prevention in industries, they provide an instant and contact less diagnosis of temperature.

Infrared pyrometers can be used when we know the exact critical point of temperature measurement. Pyrometers help in temperature measurement at a certain point. But thermal imagers are required in applications where temperature of a certain area needs to measured. High resolution, like 640x480 pixels /384x288 pixels ,is not always needed in industrial applications. Sometimes we just need to identify faults. So AST LTE-80 ,80x64 pixels, is the most economic solution.

Need of Thermal Imager

Most of industries or plants need to run continuously 24 hours a day, 365 days a year so in order produce faster, better and more efficient result at lower cost thermal imaging cameras are best option.

Thermal camera are the most economic option for identifying failures before they cause any catastrophe.

- 1. They can identify positions like where connections are unsecured.
- 2. Motor inspection
- 3. Insulation inspection
- 4. Internal damage in plants
- 5. Conveyors inspection

Technical Specifications

Detector Data				
Туре	Uncooled FPA detector			
IR Resolution	80x64			
Pixel Pitch	17µm			
Spectral Range	8 - 14µm			
NETD	<80mK@f1.0, 30Hz 300 K			
Frequency	9Hz			
Lens Data				
Focus	Fixed			
Image & Temperature Measurement Performance				
E-zoom	2x, 4x			
Temp. Measurement Range	0°C - 500°C higher range upto 1000°C/optional			
Accuracy	±2°C or ±2% of reading			
Hot Spot Tracking	Real time display of hot spot location and temperature values			
Setting	Date/Time, °C/°F K, language			
Emissivity Correction	0.01 to 1.0 adjustable; correction by predefined transmission table			
Color Palettes	12 types including white hot, black hot, iron red, rainbow			



Image I Video I Report Generation I Power System I Network Interface I CVBS interface I Power interface I I/O I Power Consumption I Environmental Data I Operating Temperature Range I Storage Temperature Range I Humidity I Shock I Vibration I EMC I Weight I	BMP/JPG format AVI format Word format, customization possible 100M ethernet, Rj45 interface, temperature data transmission Analog video output, offering ground observation information DC 5V 4 Analog O/P & 4 Digital I/O (Optional) 4W 10°C ~ +60°C 40°C ~ +70°C 95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
Video / Report Generation / Power System / Network Interface / CVBS interface / Power interface / I/O / Power Consumption / Environmental Data / Operating - Temperature Range - Storage Temperature Range - Humidity / Shock / Vibration / EMC / Weight /	AVI format Word format, customization possible 100M ethernet, Rj45 interface, temperature data transmission Analog video output, offering ground observation information DC 5V 4 Analog O/P & 4 Digital I/O (Optional) 4W 10°C ~ +60°C 40°C ~ +70°C 95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
Report Generation Network Interface Network Interface 1 CVBS interface 1 Power interface 1 I/O 2 Power Consumption 2 Environmental Data 0 Operating - Temperature Range - Storage Temperature - Humidity 2 Vibration 2 EMC 0 Physical Data 0	Word format, customization possible 100M ethernet, Rj45 interface, temperature data transmission Analog video output, offering ground observation information DC 5V 4 Analog O/P & 4 Digital I/O (Optional) 4W 10°C ~ +60°C 40°C ~ +70°C 95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
Power System Network Interface 1 CVBS interface 1 Power interface 1 I/O 4 Power interface 1 I/O 4 Power Consumption 4 Environmental Data 0 Operating - Temperature Range - Storage Temperature Range - Humidity - Shock 2 Vibration 2 EMC 0 Physical Data -	100M ethernet, Rj45 interface, temperature data transmission Analog video output, offering ground observation information DC 5V 4 Analog O/P & 4 Digital I/O (Optional) 4W 10°C ~ +60°C 40°C ~ +70°C 95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
Network Interface 1 CVBS interface 1 Power interface 1 I/O 4 Power Consumption 4 Environmental Data 4 Operating - Temperature Range - Storage Temperature Range - Humidity - Shock 2 Vibration 2 EMC 0 Physical Data -	100M ethernet, Rj45 interface, temperature data transmission Analog video output, offering ground observation information DC 5V 4 Analog O/P & 4 Digital I/O (Optional) 4W 10°C ~ +60°C 40°C ~ +70°C 95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
CVBS interface // Power interface I I/O // Power Consumption // Environmental Data // Operating - Temperature Range - Storage Temperature - Humidity - Shock // Vibration // EMC O Physical Data -	Analog video output, offering ground observation information DC 5V 4 Analog O/P & 4 Digital I/O (Optional) 4W 	
Power interface I I/O 4 Power Consumption 4 Environmental Data 4 Operating - Temperature Range - Storage Temperature Range - Humidity - Shock - Vibration - EMC 0 Physical Data -	DC 5V 4 Analog O/P & 4 Digital I/O (Optional) 4W 10°C ~ +60°C 40°C ~ +70°C 95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
I/O 4 Power Consumption 4 Environmental Data 4 Operating Temperature Range - Storage Temperature Range - Humidity - Shock 2 Vibration 2 EMC 0 Physical Data -	4 Analog O/P & 4 Digital I/O (Optional) 4W 10°C ~ +60°C 40°C ~ +70°C 95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
Power Consumption 4 Environmental Data 0 Operating - Temperature Range - Storage Temperature - Range - Humidity - Shock 2 Vibration 2 EMC 0 Physical Data -	4W 10°C ~ +60°C 40°C ~ +70°C 95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
Environmental Data Operating Temperature Range Storage Temperature Range Humidity Shock Vibration EMC O Physical Data Weight	10°C ~ +60°C 40°C ~ +70°C 95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
Operating Temperature Range Storage Temperature Range Humidity Shock 2 Vibration 2 EMC 0 Physical Data Weight	210°C ~ +60°C 40°C ~ +70°C 95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
Storage Temperature Range-Humidity-Shock-Vibration-EMCOPhysical Data-Weight-	40°C ~ +70°C 95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
Humidity Shock 2 Vibration 2 EMC 0 Physical Data Weight 4	95% (non-condensing) 25G, IEC60068-2-29 2G, IEC60068-2-6	
Shock 2 Vibration 2 EMC 0 Physical Data Weight 4	25G, IEC60068-2-29 2G, IEC60068-2-6	
Vibration 2 EMC 0 Physical Data	2G, IEC60068-2-6	
EMC (Physical Data		
Physical Data	CE/FCC	
Weight		
	Approx. 600g	
Dimensions ((OD x L) 78 x 140.30 mm	
Mounting	M40x1 Mounting with Check Nut and Clamp	
Packing		
Standard	Thermal Imaging camera LTE 80 Integration cable, Software CD-ROM, Warranty card, registration card, Calibration certificate, Packing kit	

We measure accurate temperature in extreme conditions

Optics Variants



HFOV x VFOV	Dist. (m)	Width (m)	Height (m)	Pixel Size (mm)
120° x 90°	1 M	3.46	2.00	36.8
	5 M	17.32	10.00	183.9
	10 M	34.64	20.00	367.9
88° x 70°	1 M	1.93	1.40	23.0
	5 M	9.66	7.00	114.9
	10 M	19.31	14.00	229.8
41° x 33°	1 M	0.75	0.59	9.3
	5 M	3.74	2.96	46.5
	10 M	7.48	5.92	93.0
18° x 14°	1 M	0.32	0.25	3.9
	5 M	1.58	1.23	19.5
	10 M	3.17	2.46	39.0

InfraView

LTE 80 has a thermal image processing software INFRAVIEW at the core of a thermal imaging system which is customizable with Client-Server Architecture for catering to multiple clients at the same time. The modular windows software INFRAVIEW can be configured / customized to cater to application / solution requirements.

AST INFRAVIEW Software allows you to control the camera record, view, manipulate and store the captured video / image as well as measured temperature data. This real time software allows simple and fast parameterization for documentation of the temperature data for optimizing process control.



Features

- More accuracy and security in every measurement
- High sensitivity of the system
- Temperature display
- Contrast adjustment
- Several lenses for different FOV
- Real time temperature measurement values

Special Features

- Configurable ROI's : point, line, free shape
- Histogram and isotherm visualization
- Hot and cold spot detection
- Color palette scaling
- Trend charts
- Alarm output
- Video and Image export
- Server client configuration

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Accessories

Water Cooling Jacket



I/O Module





DIN RAIL Mounted I/O Module (Ref No. 9200-07)

Typical Configuration with PC

An I/O module acts as an interface between computer and thermal camera. The I/O module provides analog and relay outputs with respect to temperature. These outputs can be customized for temperature indication, alarm generation or error reporting.

- All I/O are user settable for range and ROI selection
- 4 analog outputs 4-20mA
- 2 Relay Outputs
- 2 Isolated Digital Inputs for triggering
- I/O can be customized according to user requirement
- I/O works on Ethernet
- Din rail Mounting for Easy Installation

Processor : Intel i3 8th Generation or Higher RAM : 4 GB HDD : 1 TB Operating System : Windows 10

(Reference No. 9200-08)

Applications

- Quality Management
- Process Automation and Process Control
- Research & Development Projects : Non-Destructive Testing of materials, Studies of Aspects in Veterinary Medicines
- Early fire detection in storage buildings, forests and even in cities.
- Traffic Control
- Process Control in Metallurgy
- Inspection of electrical equipment
- Building thermography around thermal bridges and localization of weak points in walls



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Camera Switch Computer

Standard Accessories

- 12 VDC power supply
- Ethernet cable 5 mtr.
- Infraview Software

Included in standard package with LTE 80 camera

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