# **TI30S**

## **Small Online Monitoring Thermal Imaging Cores**

TI30S has the characteristics of compact structure, small volume, light weight, stable performance, high sensitivity, clear image, accurate temperature measurement and flexible control. With special athermal infrared lens, it is integrated into shield, PTZ and other devices to form a complete infrared online monitoring system. It can meet the non-contact real-time temperature measurement in the process state detection field of industry, power, electronics and other industries.

#### Features

Stable performance and can be integrated into complex application environment

Multiple motorized lenses, supporting auto focusing

The second generation image algorithm Ultra DDE, supports image flipping

Temperature data stream can be recorded in real time, and the picture supports State Grid format

RJ45 Interface 100M/1000M adaptive

Provide professional analysis software and SDK software package for development

Support ONVIF protocol and RTSP video stream



#### **Applications**

Electric temperature measurement

Inspection robot

Industrial temperature measurement

Component integration

## ULIRVISION

### **Technical Specifications**

Item	TI30S			
Detector Data				
Туре	Uncooled FPA			
IR resolution	384×288			
Pixel pitch	17μm			
Spectral range	8∼14µm			
NETD/Sensitivity	$<$ 60mK @F1.0, 30 $^\circ\!\mathrm{C}$ (50mK optional)			
Lens Data				
Focal distance	Fixed 6.2mm	Manual 15mm(optional)	Motor 15mm	
FOV	55.5°* 43°	24°* 18°	24°* 18°	
Minimum imaging distance		50cm		
IFOV	2.742mrad	1.133mrad	1.133mrad	
Focus		Manual/Fixed/Motor(support auto focus	5)	
Image Performance				
Image enhancement	The second generation image algorithm Ultra DDE			
Frequency	25Hz			
Digital zoom	1.0X~4.0X, 0.1 step			
Palette	12 palettes(including iron, rainbow, white hot and black hot etc.)			
Measure				
Temperature range	Three gear temperature measurement: -20 $^\circ$ C $\sim$ +150 $^\circ$ C ; 120 $^\circ$ C $\sim$ 600 $^\circ$ C ; -20 $^\circ$ C $\sim$ +350 $^\circ$ C			
Measurement accuracy	±2℃/±2%(reading)			
Measurement correction	Support, manual/auto			
Highest temperature tracking	Display the location and value of the highest temperature point in real time			
Emissivity correction	Adjustable from 0.01 to 1.0 or selected from list of materials			
Ambient temperature correction	Support (according to the entered ambient temperature)			
Humidity correction	Support (according to the entered relative humidity)			
Transmittance correction	Support (adjustable from 0.01 to 1 according to the entered transmittance)			
Function settings	Date/time, temperature unit °C/°F/K switch			
Data storage				
Temperature data	Sta	Standard UTD format, analysis with IRX software		
Temperature data flow	HXR grayscale video format, can be played back by Irx software			
	Image processing can be performed during cyclic playback			
Image format	Support JPG (vector image), BMP (bitmap), JPEG (analyzable), UTD (grayscale image)			
Video format	AVI format, H.264 compression			
RAM	64G high speed TF card			
Storage control	Serial port			
Report	Support, with content selection orientation			
Interface				
Network interface	100M/1000M Ethernet, RJ45, temperature data transmission			

Industrial terminal	10pin terminal, including power supply and analog video			
Serial port control	RS-232/RS-422 optional			
Alarm I/O	Support			
API	Support SDK(Windows&Linux)			
Power System				
Working voltage	DC9.5~14V Standard: DC12V			
Power consumption	Normal≤2W Peak power consumption:≤2.5W			
Environment Parameters				
Operating temperature	20℃~+50℃			
range	-20 C ~~+50 C			
Storage temperature range	-40°C∼+70°C			
Humidity	≤90%(Non-condense)			
Vibration	5Hz $\sim$ 200Hz $\sim$ 5Hz 2.5G swept sine			
Shock	30G 11ms			
EMC	CE/FCC			
Physical data				
Size	Without lens: 60.6mm(L) * 46mm(W) * 49.5mm(H)			
	With 15mm fixed focus lens: 70mm(L)* 46mm(W) * 49.5mm(H)			
Weight	<145g(Without lens) With 15mm fixed focus lens: 190g			
Mounting	UNC 1/4-20 standard tripod interface, M2 threaded joint			
Packing				
Standard	Thermal camera, 10PIN terminal, warranty card, certificate, power cable, analog connection line, RCA to BNC connector			

### ULIRVISION