Fast Temperature Measuring System

RG-WX-TC Series

INNOVATION
Beyond Networks

Ruijie

Overview

Ruijie's fast temperature measuring system combines infrared thermal imaging, network transmission, face recognizing, and temperature correction technologies. In its simplest form, there are an infrared thermal imaging camera, a black body and a tripod.

This system features high sensitivity, visualized thermal images, wide detection scopes, no contacts, and safety in use. Even if a subject moves fast in and out a detected scope, the device is still able to display his/her thermal images and the highest shell temperature immediately.

This system is an ideal choice for crowded scenarios, such as industrial parks, office buildings, schools, hospitals, public security organizations and governmental agencies.

Its capacities can be fully demonstrated in indoor environments.

Features

Smart Functionality

Abnormal temperatures can be detected.

Photos are automatically shot for those who have abnormal temperatures.

The system is connected to PCs, so alarms are synchronized to the PCs.

Thermal Imaging

Uncooled infrared focal-plane detector

Support dual-light fusion mode

Support PIP (Picture in Picture) mode where visible light is overlaid with thermal images

Support various pseudo color modes

Visible Light

2-million Stellarcamer 1/2.9" Progressive Scan CMOS

Support low bit rate, low delay, and ROI enforcing coding

Support NDR (Digital Noise Reduction) and 80dB WDR (Wide Dynamic Range)

System Functions

Support output based on dual uplinks and single IP address

Support dual streams and NVR displaying

Operating temperature and humidity: 5ºC to 40ºC (41ºF to 104ºF), < 95% RH

Interfaces

Support 10M/100M auto-sensing Ethernet ports

One port for 12 V DC input

Security

Support security certificates, such as HTTPS

Support 3-level user authority management, IP address filtering and authorized users and passwords

Technical Specifications

Infrared Thermal Imaging Camera			
Type	**Indicator**	**RG-WX-TC01**	**RG-WX-TC02**
Thermal Imaging	Sensor type	Uncooled VOx detector	Uncooled VOx detector
	Max image size	160×120	384×288
	Pixel size	17µm	17µm
	Response wave band	8~14µm	8~14µm
	NETD (Noise Equivalent Temperature Difference)	≤ 40mk (@25°C,F#=1.0)	≤ 50mk (@25°C,F#=1.0)
	Focal length of thermal camera	3.85mm	18mm
	Field angle of thermal camera	40°×30°	24°×19°
	Object distance	0.5m-1.5m	3~6m
	F value	1.1	1.0
	Pseudo color	White, black, multiple colors, and amber	White, black, multiple colors, and amber
Visible Light	Sensor type	2-million Stellarcamer 1/2.9" Progressive Scan CMOS	
	Min illuminance	0.005Lux , 0 Lux with IR	
	Shutter	1/3s to 1/100,000s	
	Focal length	2.8mm to 17mm	

	ICR	ICR infrared light filter
	WDR	80dB
Black Body	Temperature resolution	0.1ºC
	Measurement Precision	±0.2ºC (single point)
	Temperature Stability	±(0.1 ~ 0.3)ºC/h
	Effective emissivity rate	0.97±0.02
	Environment temperature	0~40ºC
Imaging	Fusion of two light types	Support fusion of thermal imaging channels and visible light information to improve image quality
	PIP	Support PIP (Picture in Picture) mode where visible light is overlaid with thermal images
	Smart information overlying	Support adding information in thermal images to visible-light images (Information of temperature measurement rules and values)
Smart Functionality	Interconnected alarm	Support
Temperature Measuring	Abnormal temperature detection	Detecting temperatures of all faces captured in the screen
	Body temperature measuring	Support AI face detection so as to measure body temperatures of many subjects at one time
	Measuring range	30ºC to 45ºC (86ºF to 113ºF)
	Alarm	Support connection with a PC to send notifications warning high temperatures, saying "You have a high temperature, please check again".
	Response time	Real-time response
	Measurement Precision	±0.3ºC
Compression Standard	Video compression standard	H.265/H.264/MJPEG
	H265 encoding type	Main Profile
	H264 encoding type	BaseLine Profile / Main Profile / High Profile
	Video compression rate	32 Kbps~8Mbps
	Audio compression standard	G.711/G.722.1/G.726/MP2L2/PCM
Network Features	Main code stream	Visible light: 50Hz: 25fps (1920 × 1080), 25fps (1280 × 960), 25fps (1280 × 720) Visible light: 60Hz: 30fps (1920 × 1080), 30fps (1280 × 960), 30fps (1280 × 720) Thermal imaging: 25fps (160×120/320×240/388×284)
	Sub-code stream	Visible light: 50Hz: 25fps (704 × 576), 25fps (640 × 480) Visible light: 60Hz: 30fps (704 × 480), 30fps (640 × 480) Thermal imaging: 25fps (160×120/320×240/388×284)
	Network protocol	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE, Bonjour
	Interface protocol	ONVIF (PROFILE S, PROFILE G), ISAPI, SDK, Ehome, GB28181
	Max No. of Signal	20
	User management	3-level user authority management: administrator, operator, ordinary user
	Security policy	Support authorized users and passwords Support HTTPS encryption and IEEE 802.1x network access control and IP address filtering
Interface	LAN	One 10/100M auto-sensing RJ45 Ethernet port
	Browser	Support IE7+, Chrome18+, Firefox5.0+, Safari5.02+ browsers Support multiple languages

Tripod	Screw size	1/4-20UNC
	No. of section	3
	Height	Min: 710mm Max: 1800mm
	Payload capacity	5 kg
System	Input power	12 V DC (±20%) Note: The 12 V DC power adapter is supplied.
	Power	12 V DC (±20%): 0.7 A, max. 8W
	Operating temperature and humidity	5ºC~40ºCV(41ºF to 104ºF，＜95% RH
	IP rating	IP53

Ordering Information

Model	Description	Remarks
RG-WX-TC01/02	Infrared thermal camera	One black body is supplied with one camera

Ruijie Networks Co., Ltd.

For further information, please visit our website https://www.ruijienetworks.com