



Fast Temperature Measuring System

RG-WX-TC Series

Ruijie Networks Co., Ltd

For more information, please visit our website <https://www.ruijienetworks.com>

Overview

Ruijie's fast temperature measuring system combines infrared thermal imaging, network transmission, AI 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 precision, visualized thermal images, wide detection scopes, no contacts, and easy deployment. When subjects pass the detected scopes, their thermal images and body temperatures are immediately displayed on the connected PCs.

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.



RG-WX-TC01



RG-WX-TC02



RG-WX-TB01



RG-WX-SJJ01
Tripod for RG-WX-TC01



RG-WX-SJJ02
Tripod for RG-WX-TC02



RG-WX-SJJ03
Tripod for RG-WX-TB01

Features

Smart Functionality

Temperatures can be taken in a real-time manner.

Alarms are released when temperatures exceeding the threshold are detected.

Photos are shot for those who have high temperatures.

Thermal Imaging

Uncooled detector

Support dual-light fusion mode

Support various pseudo color modes

Visible Light

Support low bit rate, and low delay

Support 3D NDR (Digital Noise Reduction)

System Functions

Support output based on dual uplinks and single IP address

Support dual streams and NVR displaying

Interfaces

Support 10M/100M auto-sensing Ethernet ports

Power Supply

Support 12 V DC and PoE power supply

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 detector	Uncooled detector
	Max image size	160×120	384×288
	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	3mm	15mm
	Field angle of thermal camera	50°×37.2°	24°×19°
	F value	1.1	1.0
	Pseudo color mode	15 modes: white, black, integrated color 1, multiple colors, integrated color 2, rusty red 1, rusty red 2, dark brown, color group 1, color group 2, Ice and Fire, Rain, red, green and dark blue	15 modes: white, black, integrated color 1, multiple colors, integrated color 2, rusty red 1, rusty red 2, dark brown, color group 1, color group 2, Ice and Fire, Rain, red, green and dark blue
Visible Light	Sensor type	4-million (1600x2500) 1/2.7" CMOS	
	Min illuminance	0.0018Lux @(F1.6,AGC ON), 0 Lux with IR	
	Shutter	1/3s to 1/100,000s	
	Focal length	4mm	6mm
	ICR	ICR infrared light filter	
Imaging	Fusion of two light types	Support fusion of thermal imaging channels and visible light information to improve image quality	
	Smart information overlying	Support adding information in thermal images to visible-light images (Information of temperature measurement rules and values)	
Smart Alarming Functionality	Sound alarm	Support. Alarms are triggered when temperatures over the threshold are detected.	
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	30°C to 45°C (86°F to 113°F)	
	Response time	Real-time response	
	Measurement Precision	±0.3°C (with a blackbody) @ 0.8m to 1.5m	±0.3°C (with a blackbody) @ 3m to 6m
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	
System	Input power	12 V DC (±20%) Note: The 12 V DC power adapter is supplied. PoE (802.3af, class 3): 42.5 V to 57 V, 0.14 A to 0.22 A	
	Power	8.5W	9.5W
	Operating temperature and humidity	15°C to 35°C (59°F to 95°F, < 90% RH)	
	IP rating	IP53	

Blackbody RG-WX-TB01	
Temperature resolution	0.1°C
Measurement Precision	±0.1°C
Temperature Stability	±0.2°C/h
Effective emissivity rate	0.97±0.02
Environment temperature	0°C to 30°C (32°F to 86°F)

Tripod		
Tripod	Screw size	1/4-20UNC
	No. of section	3
	Height	710mm to 1700mm
	Payload capacity	5 kg
	Switching plate	Switching plates for RG-WX-SJJ01 and RG-WX-SJJ02 No switching plate for RG-WX-SJJ03

Measurement Parameters			
Model	Blackbody-Camera Distance	Pitch Angle	Measurement Distance
RG-WX-TC01	1m	< 20°	0.8m to 1.5m
RG-WX-TC02	3m		2m to 10m

Packing Information

Model	Per-Set Package		Multi-Set Package		
	Packing Size (mm)	Weight	Packing Size (mm)	Weight	Set No. per Package
RG-WX-TC01	250 x 225 x 139	1.2 kg	578 x 231 x 257	6 kg	4
RG-WX-TC02	430 x 225 x 188	1.5 kg	463 x 437 x 387	7.5 kg	4
RG-WX-TB01	223 x 193 x 159	1.7 kg	458 x 396 x 166	8 kg	4
RG-WX-SJJ01	120 x 120 x 720	1.7 kg	380 x 265 x 730	12 kg	6
RG-WX-SJJ02	120 x 120 x 720	1.7 kg	380 x 265 x 731	12 kg	6
RG-WX-SJJ03	120 x 120 x 720	1.6 kg	380 x 265 x 732	11.4 kg	6

Ordering Information

Model	Description	Remarks
RG-WX-TC01	Infrared thermal camera	Dome camera, max image size: 160 x 120
RG-WX-TC02	Infrared thermal camera	Bullet camera, max image size: 384 x 288
RG-WX-TB01	Blackbody	Temperature resolution: 0.1°C Temperature precision:
RG-WX-SJJ01	Tripod for RG-WX-TC01	A switching plate equipped, 3 sections, scalable
RG-WX-SJJ02	Tripod for RG-WX-TC02	A switching plate equipped, 3 sections, scalable
RG-WX-SJJ03	Tripod for RG-WX-TB01	A switching plate equipped, 3 sections, scalable