

# UCAM-220TT

## (Thermographics Turret Camera)



### Features

- 160 × 120 resolution in thermal channel, high sensitivity sensor.
- Point, line and area for temperature measurement
- Temperature range: 30°C to 45°C; temperature accuracy:  $\pm 0.5$  °C
- Reliable temperature exception alarm function
- 3D DNR, image detail enhancement
- Strobe light and audio alarm

### Introduction

UCAM-220T Thermographic Turret Temperature Measurement Camera is able to measure object's temperature at a high accuracy in real time. It is capable to discover and track people with higher body temperature among the crowded public area, it can be widely used in places such as customs, airport, school and hospital for inspection and quarantine.

### Key Functions

#### High Efficiency

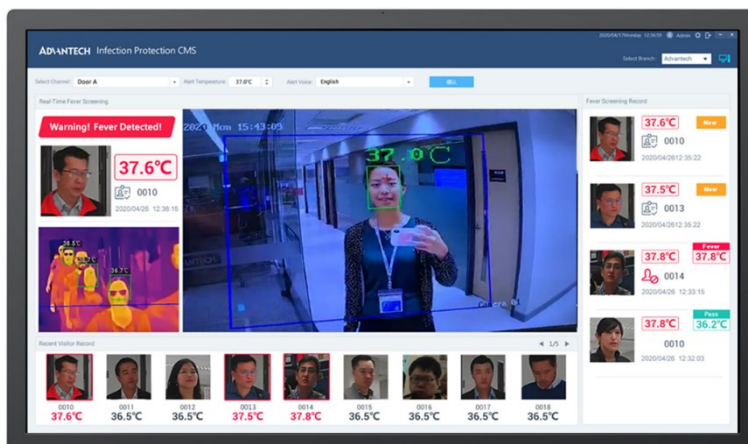
It only needs one second that UCAM-220TT can detect temperature of each person. Therefore, no congestion will be made when passing through the site where temperature needs to check.

#### Safety

UCAM-220TT supports non-contact temperature measurement which can achieve accurately measuring temperature around 1 meter away that reduce the risk of infection coming from physical contact.

### Facial Counting & Recognition Integrated Management Software

UCAM-220TT support AI face detection, multiple targets detect body temperature at the same time that can integrated with Advantech Video AI Facial Recognition Edge. The Integrated Central Management System can record the face detected information and identification for further management



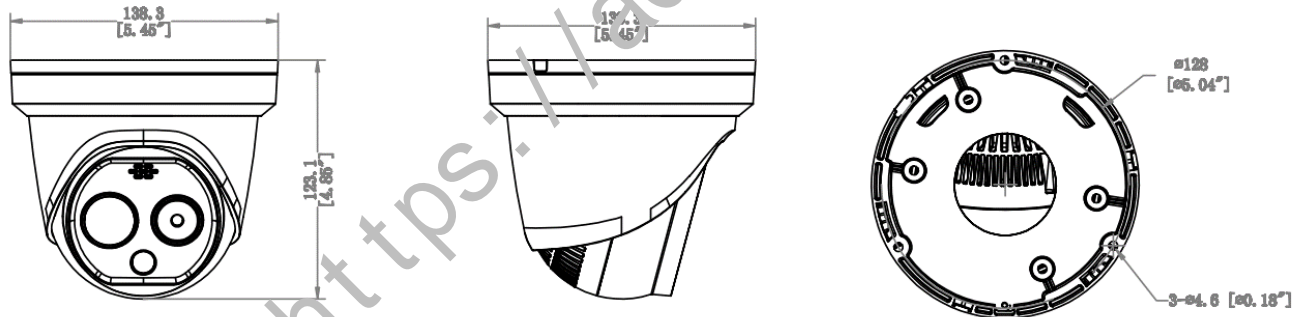
## Specifications

Thermal Module	Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
	Max. Resolution	160 × 120 (the resolution of output image is 320 × 240)
	Pixel Interval	17μm
	Response Waveband	8 μm to 14 μm
	NETD (Noise Equivalent Temperature Difference)	≤ 40 mk (@25 °C, F# = 1.1)
	Lens (Focal Length)	3.1 mm
	IFOV	5.48 mrad
	Field of View	50° × 37.2° (H × V)
	Min. Focusing Distance	0.3 m
	Aperture	F 1.1
	Frame Rate	8.3 fps(9Hz)
Optical Module	Max. Image Resolution	2688 × 1520
	Image Sensor	1/2.7" Progressive Scan CMOS
	Min. Illumination	Color: 0.0089 Lux @(F1.6, AGC ON), B/W: 0.0018 Lux @(F1.6, AGC ON)
	Shutter Speed	1 s to 1/100,000 s
	Lens (Focal Length)	4 mm
	Field of View	84° × 44.8° (H × V)
	WDR	120 dB
	Day & Night	IR cut filter with auto switch
Image Function	Bi-spectrum Image Fusion	Fusion view of thermal view and overlaid details of the optical channel
	Picture in Picture	Combines details of thermal and optical image PiP, overlay thermal image on optical image
Smart Function	VCA (Video Content Analysis)	4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total.
	Temperature Measurement	3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line).
	Temperature Range	30°C to +45 °C
	Temperature Accuracy	± 0.5 °C
	Fire Detection	Dynamic fire point detection, up to 10 fire points detectable.
Infrared	IR Distance	Up to 15 m
	IR Intensity and Angle	Automatically adjusted
Network	Main-Stream	Visible Light: 50Hz: 25fps (2688 × 1520), 25fps (1920 × 1080), 25fps (1280 × 720)
		Visible Light: 60Hz: 30fps (2688 × 1520), 30fps (1920 × 1080), 30fps (1280 × 720)
		Thermal: 1280 × 720, 704 × 576, 640 × 480, 352 × 288, 320 × 240 (8.3 fps(9Hz))
	Sub-stream	Visible Light: 50Hz: 25fps (704 × 576), 25fps (352 × 288), 25fps (176 × 144)
		Visible Light: 60Hz: 30fps (704 × 480), 30fps (352 × 240), 30fps (176 × 120)
		Thermal: 704 × 576, 352 × 288, 320 × 240 (8.3 fps(9Hz))
	Video Compression	H.265/H.264/MJPEG
	Audio Compression	G.711u/G.711a/G.722.1/MP2L2/G.726/PCM
	Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
	Simultaneous Live View	Up to 20
	User/Host Level	Up to 32 users, 3 levels: Administrator, Operator, User
	Security Measures	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x, access control, IP address filtering

# Thermographic Turret Camera

Integration	Alarm Input	1-ch inputs (0-5 VDC)
	Alarm Output	1-ch relay outputs, alarm response actions configurable
	Alarm Action	SD recording/relay output/smart capture/FTP upload/email linkage/audio alarm/white light alarm
	Audio Input	1, 3.5 mm Mic in/Line in interface. Line input: 2 to 2.4 V [p-p], output impedance: 1 K $\Omega$ $\pm$ 10%
	Audio Output	Linear level, impedance: 600 $\Omega$
	Reset	1, Reset Button
	Communication Interface	1, RJ45 10M/100M self-adaptive Ethernet interface. 1, RS-485 interface
	SD Memory Card	Built-in micro SD card slot, support Micro SD/SDHC/SDXC card (up to 128 GB) Supports manual/alarm recording
	Analog Video Output	1.0 V [p-p]/75 $\Omega$ , PAL/NTSC
	Web Browser	IE9+, Chrome 31-44, Firefox 30-51, Safari 5.02+(mac)
General	Menu language	32 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil)
	Power	12 VDC $\pm$ 20%, two-core terminal block PoE (802.3af, class 3)
	Power Consumption	12 VDC $\pm$ 20%: 0.65 A, max. 7.5 W PoE (802.3af, class 3): 42.5 V to 57 V 0.11 A to 0.22 A, max. 8 W
	Working Temperature/Humidity	Temperature: -20 $^{\circ}$ C to 50 $^{\circ}$ C Humidity: 95% or less
	Protection Level	IP66 Standard TVS 6000V lightning protection, surge protection, voltage transient protection
	Dimensions	138.3 mm $\times$ 138.3 mm $\times$ 123.1 mm (5.45" $\times$ 5.45" $\times$ 4.85")
	Weight	940 g (2.07 lb)

## Dimension Specification



## Ordering Information

P/N	Description
UCAM-220TT-U01	Thermographic Turret Camera
96PD-TCTAD	Turret Tripod adaptor
96PD-TCABB	Black Body