

AST3

Dual Spectral Thermal Imaging Thermometer System

User Manual



JIANGSU ASCENDENT OPTRONICS INC.

1. Product Usage

This device is used for rapid body temperature measurement and mask recognition.

2. Product Features

- ✓ High-precision non-contact temperature measurement, with a temperature measurement accuracy of up to $\pm 0.2^{\circ}\text{C}$
- ✓ AI face detection and recognition, support mask detection, people counting function
- ✓ Precise positioning of the temperature measurement site: automatic measurement and tracking of the highest temperature of the forehead and lacrimal gland
- ✓ Visible light/infrared dual light lens (single light/dual light optional)
- ✓ Support temperature threshold setting and automatic screening and early warning mechanism, instant alarm for abnormal body temperature and synchronized snapshot
- ✓ Photo and video recording functions
- ✓ Pixel-by-pixel real-time accurate radiation calibration, accurate temperature measurement without black body
- ✓ Support multi-machine networking

3. Product parameters

	Model	AST3
Infrared Channel	Type	UFPA
	Pixel	384×288
	Wavelength Range	7.5-14um
	Standard Focal Length	13mm
	Field Range	28°×21°
	Sensitivity	< 50mk
Visible Light Channel	Type	1/2" CMOS
	Pixel	1920×1080
	Standard Focal Length	6mm
	Field Angle	62°×37°
	Audible and Visual Alarm	Build-in warning lights and speakers
Detection Performance	High Temperature Source Detection Rate	> 99%
	False Accept Rate	< 5%
	Face Detection	Support
	Multi Face Thermometry	> 279 persons/ minute
	Automatic Alarm	Support
	Face Recognition	Optional
	Measure Distance	2-7meters
Measurement	Temperature Range	+30°C~ +45°C, Temperature measuring range can be extended according to user requirements
	Accuracy	$\pm 0.2^{\circ}\text{C}$ (J380-HS) $\pm 0.3^{\circ}\text{C}$ (J380-CS)

	Temperature Correction	Automatic(based on input transmittance)
	Maximum Temperature Tracing	Real-time display of high temperature point location and temperature value
	Background Temperature Correction	Automatic
	Manual Temperature Correction	Support
	Function Setting	Date/time, temperature unit °C, and language
Data Storage	Image Format	JPG
	Video Format	AVI format, MJPG compression
	Storage Format	Automatic/ manual operation
Port	Infrared Video Output	RTSP
	Visible Video Output	RTCP
	Infrared Control	TCP, Onvif
	Visible Control	Onvif
	API	Support SDK(windows)
Power System	Operating Voltage	DC:12V
	Power Consumption	< 6W
Environmental Parameter	Operating Temperature	-30°C~+60°C
	Storage Temperature	-40°C~+70°C
	Humidity	≤95%(RH)
	Vibration	2G(IEC60068-2-6)
	Shock	25G(IEC60068-2-29)
	IP Code	IP65
	EMC	Match with CE/FCC
Physical Properties	Size	236mm(L)×130mm(W)×80mm(H)
	Weight	≤850g
	Installation Interface	Standard tripod connection and M3 thread connection
Configuration	Standard Configuration	Host, black body(J380-HS), integrated cable, warranty card, certificate, and portable case
Package	Size	420mm(L)×340mm(W)×260mm(H)
	Weight	6.6Kg

4. Product size and interface introduction

4.1 product size



Figure 2 Size of the product

4.2 Product interface leads

As shown in the figure, the product appears to include a network interface and a power interface

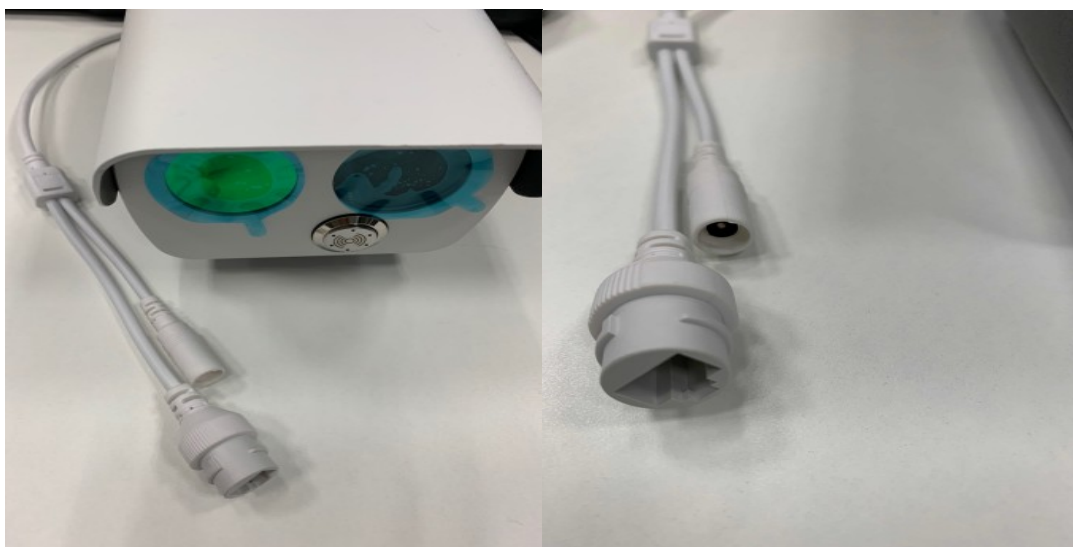


Figure 3 Product interface

5. Packing list

Name	Unit	Remark
AST3	1	Standard
DC power adapter	1	
DC extension cord	1	
Cable	1	
USB Storage	1	
POE Splitter	1	
Black Body	1	Optional
Power supply line	1	