



TCI322



Binocular Iris Collector

Version 1.4

Product Specification

Product Type: Iris Recognition

Product Specification

- Product Overview
- Product Features
- Software System
- Application Scenario
- Product Structure
- Product Parameters

Revision Record			
Date	Version	Modification Description	Author
2019-04-11	1.0	Initial version product specification	He Qiming

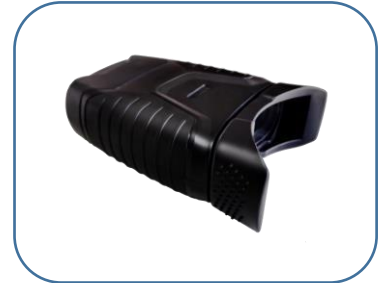
Prepared by: He Qiming

Reviewed By: Yang Chunlin

Date: 2019-4-11

Product Overview

Eyecool binocular iris collector TCI322 is a binocular iris image capture biometric identification device that meets the regulation *Technical Requirements for Iris Capture Device for Criminal Investigation*. The device adopts binocular telescope structure design, which is easy to use, more ergonomic, and is suitable for all kinds of people. USB interface is adopted, which can meet the secondary development needs of different users.



Product Features

1. Iris image quality meets the regulation *Technical Requirements for Iris Capture Device for Criminal Investigation*;
2. The telescope design perfectly shields the influence of external light and can be used normally indoors and outdoors;
3. The device supports both iris capturing and identification functions, and can complete relevant functions within 1 second;
4. The device is light, ergonomic and easy to use

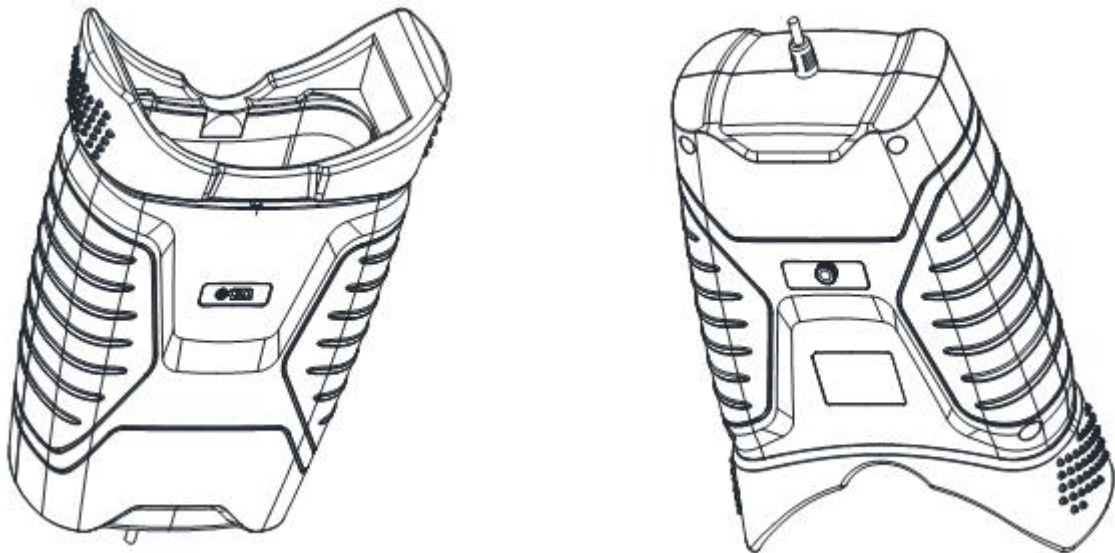
Software System

1. Support the integration of images captured by iris devices that meet the regulation *Technical Requirements for Iris Capture Device for Criminal Investigation*;
2. Support docking with the criminal specialized system;
3. Support iris data collection and deduplication;
4. Support iris identification and verification;
5. Support user permission management.

Application Scenario

1. Deployed in the personnel basic information integrated collection room for iris image collection;
2. Deployed at key checkpoints to collect iris information and verify the identity of key personnel and criminals;
3. Provide efficient and shared iris comparison services for all police categories.

Product Structure



Structure Description:

Eye mask, reflecting the mysterious scientific and technological design concept, is used to assist iris location for iris capture operation

Nameplate, product brand logo, the side with nameplate is the front, which should face up when used.

Hand holding area, used to assist users to hold the device.

Connecting cable, supporting USB communication, is used for connecting and supplying power between the device and PC or terminal machine.

Standard tripod mounting nut, which can be used to install the product on the tripod

Product Parameters

Basic Parameters	Country of Origin and Manufacturer	China
	Boot Time	<2s
	Dual Optical Camera	5 Mega Pixel
	Working Voltage	DC5V($\pm 5\%$)
	Power Waste	Standby 0.2W, working 2.25w
	IPD	38-80mm
	Size	220mm \times 160mm \times 65mm (length \times width \times height)
	Installation Mode	Drive free
	Weight	About 450g
	USB Cable Length	1.5 Meters (can be customized)
Product Functions	Working Mode	Handheld Binocular iris Scanner
	Basic Function	Iris capture, iris auto capture, iris split, iris image quality check, anti-dilation, image finding and stabilization
	Housing	Fixed distance between iris and camera
	Visor	Protect eye from sunlight
	Capture Distance	118mm
	Work Distance	0cm-1cm (distance from eyes to eye mask)
Product Performance Metrics	Capture Time	<1s
	Images Per Second	5fps
	Device Resolving Power	4lp/mm
	Iris Capture Resolution	≥ 20 pixel/mm(508ppi)
	Spatial Resolution	>60% @ 4.0Lp/mm
	Gray Level	256 grades
	Gray Level Utilization Rate	≥ 6 bits
	Contrast between Iris	≥ 30

	and Pupil	
	Contrast between Iris and Sclera	≥ 10
	Proportion of Iris Effective Area	$\geq 60\%$
	Capture Volume	$\geq 28\text{mm} \times 20\text{mm} \times 12\text{mm}$
	Illumination	850nm Near IR
	Security for Eyes	Comply with IEC62471, GB/T 20145-2006
Communication Interface	Interface	USB 2.0
Compatibility	Operating System	SDK for 32 / 64bit Windows, Linux, Android
Environmental Adaptability	Work Temperature	$-10^{\circ}\text{C} - 55^{\circ}\text{C}$
	Relative Humidity	10%~90%
	Data Standard	ISO/IEC 19794-6; JPEG2000 K1, K2, K3, K7
	IP Rating	IP64
	Handling	ISTA 2A Shipping and Handling Specification
	Certifications	CE, RoHS, FCC
	Electrostatic Discharge Immunity	Gb/t 17626.2-2006 grade 2
	Radio Frequency Electromagnetic Field Radiation Immunity	Gb/t 17626.3-2006 grade 2