eyecool

TCF261

Face Recognition Encryption Camera

Version 1.0

Specifications

Product Type: Face recognition

Specifications

Product Overview

The dual-mode face recognition encryption camera TCF261 adopts near-infrared complementary light technology, has both near-infrared and visible light image capture functions, and combines the face recognition algorithm with independent intellectual property rights of Eyecool Technology to achieve accurate face recognition, image capture, physical examination and other functions under different light conditions. At the same time, this encrypted camera supports the encryption of camera images to ensure the privacy of image data information from the source. It can support customers to customize the key information of the security system and ensure the independence of key information between different customers. Ensure that the independence of the key between the devices is supported, and a single device will not cause a wide spread impact after being broken. The data signature function is provided to ensure that the collected images can be traced back to the source. Two types of algorithms are supported: national

secret algorithm and international algorithm. It can meet the application needs of government customers who have demand for encryption algorithms in China or other customers abroad.

Product Functions

Face capture: can automatically capture face images and store them in the specified database;

Face comparison: support the function of face detection and comparison, and make the identity verification faster;

Face recognition: can automatically identify target person, and support black/white list management;

Image encryption: support the encryption of camera images to ensure the privacy of image data information from the source;

Customer customized key: support customer customized key information of security system to ensure the independence of key information between different customers;

Data signature: provide data signature function to ensure that the collected images can be traced back to the source;

Algorithm support: support the national encryption algorithm and international algorithm, respectively adapt to the application needs of domestic government customers or foreign and other customers who need encryption algorithms

Product Advantages

1. The captured image has high definition and has a unique processing scheme for various color environments: the camera has strong light processing ability to capture clear images under strong light, weak light and backlight conditions; At the same time, the exposure time, white balance, contrast, brightness, saturation and other parameters can be automatically controlled, and the color restoration is high.

2. Advanced algorithm, supporting face detection and recognition functions: the camera carries the face recognition algorithm with independent intellectual property rights of Eyecool Technology, and combines with Eyecool Technology face recognition software to realize face detection, face recognition and other functions;

At the same time, CMOS photosensitive chip is used to improve the pixel and ensure the face recognition rate and authentication rate.

3. Small size, easy to embed in various self-service devices: the module structure is small and simple, easy to embed in VTM, ATM and other financial self-service devices.

4. Encrypt images and customize keys for customers: support the encryption of camera images to ensure the privacy of image data information from the source; It can support customers to customize the key information of the security system and ensure the independence of key information between different customers; Ensure that the independence of the key between the devices is supported, and a single device will not cause a wide spread impact after being broken.

Application Scenario

It can be widely embedded in bank self-service equipment such as ATM, deposit machine (CDM), deposit and withdrawal machine, self-service inquiry machine, self-service payment machine, self-service card issuer, self-service printer, etc. It has been applied in China Postal Savings Bank, China Construction Bank and Shenzhen Rural Commercial Bank, China.

ATM

Self-service payment machine
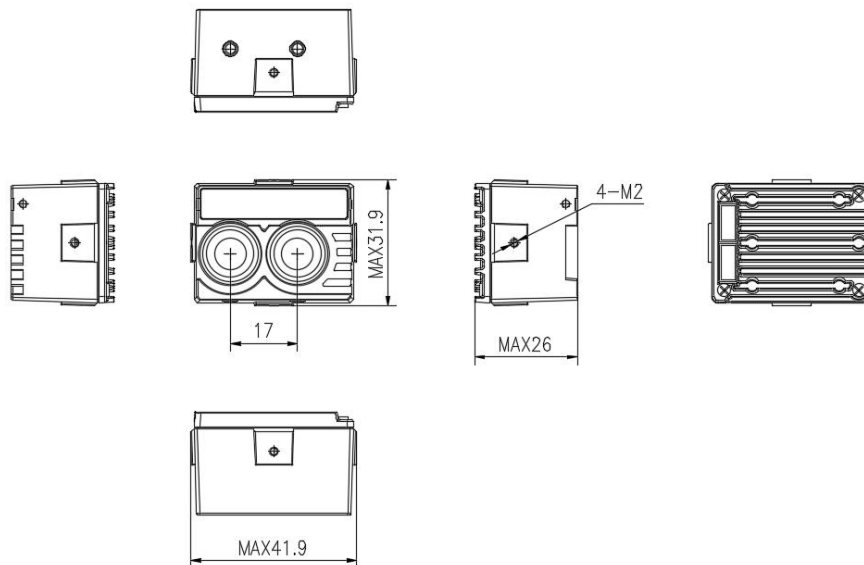

Self-service teller machine

Self-service card issuing machine

Product Appearance

Product Dimension

Fixing method: fixed through M2 fixing holes on both sides

Product Specifications

	Product type	Dual mode camera: near infrared and visible light	
	Sensor	CMOS	
	Pixel	Color: 3 million pixels Infrared: 2 million pixels	
	Resolving power	Color: support 320 * 240, 640 * 480, 1280 * 720 *, 1920 * 1080, 2048 * 1536, etc. Infrared: support 320 * 240, 640 * 480, 1280 * 720 *, 1920 * 1080，etc.	
Basic parameters	Maximum frame rate	Color: 25FPS @ 2048 * 1536 25FPS @1920*1080 25FPS @1280*960 25FPS @1280*720 25FPS @1280*720 25FPS @1024*768 25FPS @800*600 25FPS @640*480 25FPS @320*240	Infrared: 30FPS @ 1920 * 1080 30FPS @1280*720 30FPS @640*480 30FPS @320*240
	Output format	MJPEG、YUV	
	Interface type	Dual USB2.0	
	Drive type	Drive-free	
	Recognition distance	400-1200mm	
	Imaging area	4.73*3.52mm	
	Light distortion	Less than 1%	
	Supported system	Windows xp, Windows 7, Windows 8, Windows 10, LINUX systems	

Performance Parameter	Camera lens	HD lens
	Exposure control	automatic
	White balance	automatic
	Wide dynamic	100dB (supporting semi-outdoor environment)
	Signal-to-noise ratio	≥39dB
	Infrared light spectrum	850nm
Other Parameters	Working temperature	-30~50℃
	Power	USB5V power supply
	Working current	Color:<300mA Infrared:<350mA
	Overall dimension	41.9x31.9x26mm
	Appearance	Metallic matte black
Encryption Parameters	Support algorithm	Standardize chip instructions, support DES, 3DES, RSA104, RSA2048, SM2, SM3, SM4
	Encryption speed	SM2 signature ≥ 50 times/second; SM3≥1.5Mbps； SM4≥1.5Mbps；
	Certification required	Certified by the National Password Administration in China