

INTEGRATED MODULE PRODUCT

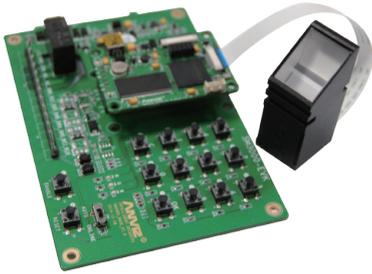
INTEGRATED MODULES MAKE APPLICATIONS MORE FLEXIBLE



Fingerprint Module

SM3000 & EVK(optional fingerprint module)

SM3000 represents a new generation fingerprint module by Anviz. It boasts a powerful 1.0GHz CPU and embedded Linux, that empowers the worlds' fastest authentication and supports multiple interfaces including RS232 and USB2.0 that allow high-speed data transfer. And with Evaluation Kit system to enable users to evaluate the core functionality of standalone modules quickly and easily.



SM3000	
Fingerprint Sensor	Anviz Optional AFOS Sensor
Sensing Area	22.0mmx18.0 mm
Resolution(dpi)	500
FP Capacity	3,000/5,000/8,000
Verification Mode	1:1,1:N
FAR	<0.0001%
FRR	<0.001%
Verify Speed	<1s(3000FP)
Comm.	TTL(57600), URAT,USB
Power	3.6~5V ±0.3
Size	21*55*25mm (W/H/D)

EVK	
Comm. I/O	USB, RS485,RS232
On-Board UI	3 LEDs & Buzzer
Operation	12 Number Keypad, Enroll&Deletebutton
Access I/O	Relay output, Wiegand output
Power	12V

ASF Series Module(Anviz Semiconductor Fingerprint Sensor)

Anviz Semiconductor Fingerprint module (ASF) is the large active area allows stable imaging output, It relies on the Anviz independent research and development BioNANO core algorithm chipset mounted on a small printed circuit board for seamless hardware integration. AFS series fingerprint module with high precision integrated, low power consumption, anti-interference and high velocity can be wide range of products such as notebooks, tablets, tokens, time and attendance terminals, and access control products such as door locks and safes.

Picture			
Model	ASF-1011	ASF - S1110	ASF - C014
Sensing area	14.0mmx11.0 mm	11.0mmx10.0 mm	Φ14.6mm
Pixels	192*192	192*192	192*192
Resolution(dpi)	508	508	508
Mechanical durability	>100 thousand	>100 thousand	>100 thousand
FP Capacity	100	100	100
Verification Mode	1:1,1:N	1:1,1:N	1:1,1:N
FAR	<0.001%	<0.001%	<0.001%
FRR	<1%	<1%	<1%
Verify Speed	<1s(100FP)	<1s(100FP)	<1s(100FP)
Comm.	UART(57600), USB 1.1	UART(57600), USB 1.1	UART(57600)
Power	3.3±0.3 (V)	3.3±0.3 (V)	3.3±0.3 (V)
Scan mode current draw	<40(mA)/VDD	<40(mA)/VDD	<40(mA)/VDD
Standby mode current draw	<5(uA)/VADD	<5(uA)/VADD	<5(uA)/VADD
Antistatic	8KV to 15KV	8KV to 15KV	8KV to 15KV
Size	33.0mmx20.0mmx2.83mm	15.4mmx14.7mmx2.83mm	Φ19.5.mm*3.6mm

USB Fingerprint Module(Anviz Semiconductor Fingerprint Sensor)



U-Bio	
Sensor	Anviz AFOS Sensor
Sensing Area	22.0mmx18.0 mm
Resolution(dpi)	500
Enroll Time	<1s
Image Read Time	<60ms
FAR	<0.0001%
FRR	<0.001%
Comm.	USB, Optional BT
Power	DC 5V
Size(W/H/D)	65*74*75mm



M-Bio	
Sensor	Anviz AFOS Sensor
Sensing Area	22.0 x 18.0 mm
Resolution	500 dpi
Enroll Time	<1s
RFID	13.56Mhz Mifare
FAR	<0.0001%
FRR	<0.001%
Comm.	USB, Optional BT
Power	DC 5V
Size(W/H/D)	25x55x25mm

Face Module

Visible light Face Detection & Capture Module (Face View)



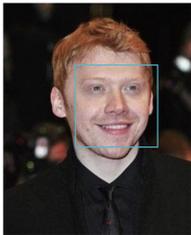
FaceView is a face capture module designed for people's entrance areas which based on HD cameras. The integrated design of heat dissipation, dustproof and waterproof, simple and efficient, provides a more reliable and stable installation method. Its ultra-WDR, excellent imaging technology in the backlight environment provides the perfect face image for complex outdoor environments.

Key Features

- ▶ High Definition up to 4M
- ▶ Embedded intelligent algorithm, support face detection, Face automatic capture, support face Motion detection and capture
- ▶ Super Wide Dynamic Range
- ▶ Broad-Band Anti-Reflection Optical Glass Window

Smart Face Capture

Faceview uses a stepper motor lens, to make sure the minimum 20 pixels of face can be detection and capture. And keep the face image store in the device or send out by network in real time.



- ▶ Support minimum 20 pixels to face detection and capture
- ▶ Support 10~1000M TCP/IP Network
- ▶ Support audio input/output
- ▶ Support alarm input/output
- ▶ Internal Standard Micro SD slot ,Support 128G Memory

IP67 Design and a Wide Temperature Range

The high level of IP67 and outdoor design strengthen the reliability of FaceView under harsh outdoor environment



Technical Specifications

Hardware	Image Sensor	1/3" CMOS	Interface	SD Card	Built-in SD card slot, supports Micro SD / SDHC / SDXC card (up to 64G)
	Lens	2.8-12mm(Φ14)		Alarm	1 in/1 out
	Focus	Support auto focus, remote zoom		Ethernet	RJ-45 (10/100/1000Base-T)RJ-45 (10/100/1000Base-T)
	Shutter Time	1/3~1/100000		Audio	1 line in/1 line out
	Iris	Auto Iris		RESET	Support
	Minimum Illumination	0.01 Lux (Color) / 0.001 Lux(B/W)			
	Day/Night	IR-CUT			
Image	DNR	3D DNR 60HZ	General	Operating Conditions	-30°C to 60°C (-22°F to 140°F)
	Frame rate	main stream (2560×1440@20fps), sub stream (704×576@30fps)		Power Supply	DC 12V / POE
		50HZ main stream(2560×1440@20fps), sub stream (704×576@25fps)		IR Range	<70M
	WDR	Super Wide Dynamic Range		Power Consumption	<12W
Image Settings	Rotate Mode(mirror, flip), Saturation, Brightness, Contrast, Sharpness adjustable by client software or web browser	Weight	1066g		
Function	Smart Alarm	Motion detection, mask detection, audio anomaly detection, Network disconnect, IP address conflict, Storage exception			
	Face Capture	Support TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,			
	Transfer Protocol	DDNS,RTP,RTSP,RTCP,PPPoE,NTP,UPnP, SMTP,SNMP			
	Interface Protocol	ONVIF, GB/T28181			

Face Module

Face all in one Module



Face all in one module not only face verification also include fingerprint, RFID and Password verification. It is adopts Embedded Linux System and Anviz the latest hardware platform. The face all in one module can be wide range of products such as Time attendance and Access Control Device.

Technical Specifications

Capacity	Card Capacity	500	Hardware	Fingerprint Sensor	Anviz AFOS Sensor
	Log Capacity	50,000		Scan Area	22mm*18mm
Interface	Comm.	RS485, Mini USB Slave, TCP/IP, Wiegand Out	Resolution	500 DPI	
	I/O	2 Relays Output, Door Open Sensor	Card Reader Module	EM RFID, Optional Mifare	
Feature	Identification Mode	FP, Face, Card, Password	Operating Voltage	DC 12V	
	Identification Time	<0.5S	Temperature	-13°F/-25°C~158°F/70°C	
	Display	3.2 Inch TFT LCD Touch Screen			
	Camera	Dual Cameras			
	Verify Distance	30-50cm			
	PoE	Standard IEEE802.3af			

Live Face Detection Module



Live Face Detection Module is Anviz new infrared face detection technology adopts two cameras. Both with infrared camera and HD color camera. The Live face Detection module can effectively prevent the deception of photos or pictures and combined with Anviz independent research and development BioNANO core algorithm can be make a face face verification system.

Technical Specifications

Dual Camera	3MP & 1.3MP (B/W)
Frame Rate	30fps
Angel of View	90°
WDR	WDR
Illumination	0.01 Lux
Live Detection	Infrared detection
Comm.	USB
SDK	Windows & Android
Power	DV 5V, 2A
Size(L/W/H)	40.4 x 22.8 x 31.8 mm

UltraMatch Iris Recognition Products

UltraMatch series are contain all of Anviz Iris recognition system. Adopting BioNANO algorithm, the system provides the most accurate, stable, and quickest iris recognition while delivering high-level security in biometric enrollment, individual identification, and access control. Containing a complex and random pattern, iris is unique and stable during one's life and the least affected by outside. Iris recognition turns to be the most accurate and fastest option to authenticate someone with certainty.

Fast Comparison

With BioNANO algorithm, the system identifies people in less than a second, and processes up to 20 people per minute.

Visual Indication

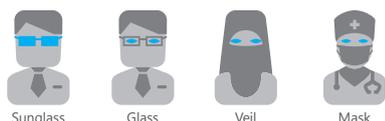
Three color LED indicators prompt the user to place their eyes at the correct distance from the device, making the user experience easy and comfortable.

Contactless Experience

The UltraMatch can identify subjects even when they are wearing eyeglasses, most sunglasses, most types of contact lenses, and even face masks.

Wide Applicability

The UltraMatch works in all lighting environments, from bright illumination to total darkness. The system supports all eye colors.



Dual Iris Recognition System (S2000/S3000)

Picture		
Model Type	S2000	S3000
Firmware Platform	Dual Core 1.0GHz	Quart Core 2.0GHz
OS	Linux	Android
Iris Capture	Dual Iris Capture	
Iris Capture Range	7.09 - 9.45 in.(180 - 240 mm)	
Capture Time	<1s	
Number of user	1,000 ~ 2,000	10,000
Log Capacity	100,000	200,000
FAR	≤1/1,000,000,000,000	
Recognition Mode	Iris, Card	
Card Read Module	EM ID Card Reader(125KHz)	Standard 13.56Mhz Mifare
LCD Area	2.23 in.	5 in. Touch Screen
Image Format	Progressive Scan	
Web Server	Support	
Wireless working mode	Access Point(Only for mobile device management)	
Temper Alarm	Support	
Eye Safety	ISO/IEC 19794-6(2005&2011) / IEC62471: 22006-07	
Input / Output	Wiegand 26/34, Anviz Wiegand Output	Wiegand 26/34, Relay Output, Door Sensor, Exit Button
Communication	TCP/IP	TCP/IP, RS485, RS232
Operating Temperature	-20°C to 50°C	
Humidity	0% to 90%	
Power Supply	12V/2A	
Operating Environment	Indoor	
Dimensions (W x H x D)	7.09 x 5.55 x 2.76 in.(180 x 141 x 70 mm)	9.76 x 8.22 x 1.69 in.(209*248*43 mm)

D2200(USB Iris Capture & Recognition Module)

D2200 is a stand-alone optical iris capture and transmission device. The acquisition instrument uses Anviz BioNANO core algorithm with USB2.0, it can be compatible with Windows, Linux and Android Operation System and it is very convenient to add personnel iris registration function in the application program, which is perfectly reflected in ease of use and applicability.



Dual Cameras capture
3 LEDs Distance and Verify Prompt
160 ~ 200 mm Capture Distance
Power Over USB and communication
Standard ISO/IEC 19794-6: 2005 iris image
Human Safety IEC/EN 62471 infrared standard

Anviz BioNANO SDK and Utilities
Support Windows/ Linux & Android
Single / Dual iris verify
Capture time <3s
Verify Speed <1s
Size 105mm*43mm*26mm

BioNANO[®] v11

Core Algorithm

Fingerprint - Facial - Iris

BioNANO Core Algorithm

Anviz biometric technologies are widely used in our fingerprint identification, face recognition and iris identification products. As one of our key technological achievements, the biometric identification algorithm BioNANO, was developed in house by our engineers and is now the algorithm used in all Anviz biometric products.



Fingerprint

- Suitable for both wet and dry fingers
- Automatically heals the broken lines in fingerprint images
- Extraction of features in worn fingerprints
- Fingerprints template auto update

- Anviz Hermetic AFOS Fingerprint Sensor
Waterproof, dust proof and scratchproof IP65 fingerprint sensor

- Fingerprint Template Auto Update
Auto update means the previous lower quality fingerprint template will be automatically replaced by the new higher quality one during fingerprint verification

- High Speed Matching
Incredibly fast matching algorithm will complete a 1:1 match less than 0.5 sec and 1:3000 users less than 1 sec.

- Living Recognition
Living recognition can get fingerprint data from beneath surface of the skin so that dryness or even damaged or worn fingers create no problems for reliable reads.

- SC SDK
Anviz Software Development Kits (SDKs) offer a device communication, template extraction, access control setting and more. They support multiple platforms and language interfaces. Complete with APIs, Anviz SDKs are fully documented and come with sample applications for as-is or modified use.

- SC EVK
Anviz provide Evaluation Kit (EVK) for OEM Modules. The EVK offers Mini USB, RS485, RS232, Wiegand, Relay output and support Standalone and USB connection work mode.



Facial

- Non-contact
- Fast speed and easy to use
- Suitable for different lux application



Iris

- No way to fake, highest security
- Most accurate, convenient, and reliable
- Touchless verification, most sanitary

- Multi-communication Mode
TCP/IP, USB device, RS485, Wiegand, GPRS, WIFI and so on.

- Webservice
Visit the device directly via the network. Setup and search the record from the device.

- Wide Temperature Circuit Design
Wide temperature circuit will ensure the device is suitable for different complex environment.

- Dual Storage
Dual storage ensures the data is more secure.

- BioNANO SDK
BioNano SDKs offer a full spectrum of capabilities, including image capture, template extraction, template matching, identification and more. BioNano SDK support multiple platforms and language interfaces.

- BioNANO EDK
Make the Anviz products with greater potential application, Anviz provide the Embedded development kits (EDKs). The Developers extend application base on Anviz product directly. The EDKs support Anviz Linux and WinCE terminal.