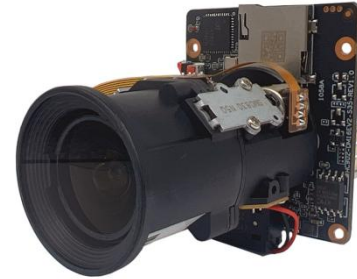## IM30Z33W-5X 3MP 5X
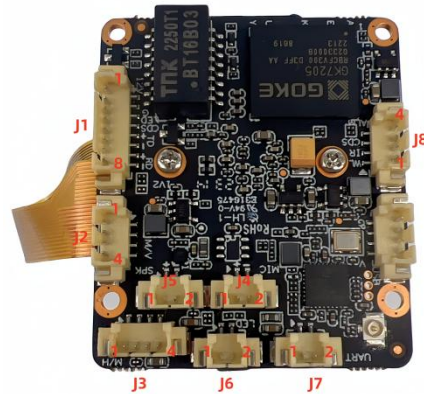## Automatic WIFI zoom network module

The IM30Z33W-5X 3 MP 5x WIFI module It is based on the HiSilicon embedded coding platform and adopts a 1/2.8 "low illumination 5 million CMOS image sensor, which has good low illumination effect and wide dynamic effect, and the maximum output resolution can reach 2304X1296@20fps The image is clearer and more delicate. Suitable for scenes that require high-definition image effects.

Key Features：

- 1/2.8 "3.0M GC3335 CMOS image sensor;
- Minimum illumination 0.05Lux@F1.2 Colorful, 0.01Lux@F1.2 Black and white;
- 5x optical synchronous focusing, with clear images throughout the zoom process;
- Two sets of motor drives, capable of directly driving a 12V motor
- Built in audio amplifier, can be directly connected to the speaker, and supports bidirectional voice
- Supports multiple night vision modes with dual light sources/single infrared light
- Intelligent 2D and 3D noise reduction algorithms, AE exposure algorithms, clean and refreshing night scenes;

- Support H.265 Main profile/H.264 Main profile/M-JPEG encoding, achieving lower bitstream high-definition image quality;
- Maximum resolution achievable 2592X1944@20fps ;
- Supports 1 mobile detection area and 4 privacy areas;
- Support for mobile detection and SMTP and FTP alarm functions
- Supports P2P access on Android and iOS mobile phones, allowing users to view images anytime, anywhere
- Supports SD card storage, with a maximum scalability of 128GB;
- Supports standard ONVIF 2.4 protocol, RTSP protocol, HIKVISION, and XM private protocols;

Technical specifications:

Image sensor	
Sensor	1/2.8" 3.0M Pixel Progressive Scan CMOS
Maximum Resolution	2304x1296@20fps
Minimum illumination	0.05Lux@F1.2(Color mode);0.01Lux@F1.2(Black and white)
Shot	
Focal length	2.8-12mm，F1.7-F3.0；
Viewing angle	135°(nearfocus)~34°(farfocus)
Audio frequency	
Input	Passive MIC
output	Built in amplifier for direct speaker connection
Function	
Lamp control mode	Infrared/White/Dual lamp mode
Support	AI humanoid detection/Motion detection/human detection
Alarm push	Mobile app/SMTP/FTP alarm push
P2P	Android and iOS
Reset	Support hardware reset and unbinding P2P function
Local storage	
Storage	TF card storage（up to 128GB）
Local storage	High definition/standard definition options
Recording method	Manual recording, alarm recording
View recording	Support remote video play back
General Protocol	
Network protocol	TCP/IP, HTTP, NTP, DHCP, UDP, SMTP, RTP, RTSP,ARP
ONVIF protocol	Standard ONVIF
Compatibility	Support access to platforms such as Hikvision,XM CMS,
Network interface	
Wired	10/100M RJ45 network interface
WIFI	2.4G, IEEE802.11 b/g/n protocol, supporting WEP, WPA, WPA2
Other	
Power supply	12VDC@0.20A
Specifications	Encoding motherboard: 38x44mm, overall height: 60mm
Operation temperature	-30°C~60°C
Working humidity	0% -90% RH (non condensing)

Interface	pin	Pin name	Functional Parameter
J1	1	12VDC	12Vpower input
	2	GND	Power supply ground
	3	LED	PWK connected to 4G board
	4	RST	RESET
	5	PWR_TD+	Adaptive network interface, physically receiving/transmitting signals (differential +)
	6	PWR_TD-	Adaptive network interface, physically receiving/transmitting signals (difference -)
	7	PWR_RD+	Adaptive network interface, physically receiving/transmitting signals (differential+)
	8	PWR_RD-	Adaptive network interface, physically receiving/transmitting signals (difference -)
J2	1	ZB+_V	Vertical motor interface
	2	ZB-_V	
	3	ZB+_V	
	4	ZB-_V	
J3	1	ZB+_H	Horizontal motor interface
	2	ZB-_H	
	3	ZB+_H	
	4	ZB-_H	
J4	1	MIC+	Mic connector, connecting the positive electrode of the microphone
	2	MIC-	Mic head interface, connecting to Mic head ground
J5	1	SPK+	Horn positive pole
	2	SPK-	Horn negative pole
J6	1	GPIO3_5	(Connected to 4G control PWER KEY)
	2	GPIO3_4	(Connected to 4G control PWER KEY)
J7	1	UART1_RXD	Infrared laser lamp (high beam) control pin
	2	UART1_TXD	
J8	1	WLED_EN	White light control enable foot output
	2	IR-LED_EN	Infrared light control enable pin output
	3	CDS	Photosensitive, high and low level input
	4	Alarm LED	Warning light