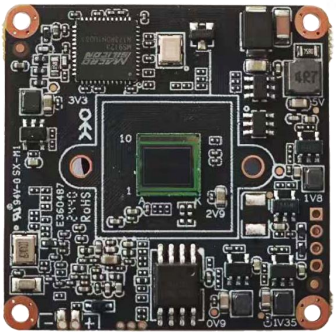
HM50C01
GK7205V300+335



The HM50C01 is a cost-effective 5MP surveillance network camera module designed for both indoor and outdoor use. It features a 1/2.8” Sony IMX335 STARVIS sensor and is powered by the GOKE GK7205V300 SoC, equipped with 1Gb of RAM. It support network video and analog video synchronous output.In terms of extended I/O capabilities, it supports dual light source illumination, as well as microphone and speaker connections, enabling two-way audio and additional interfaces.

For secondary development, the HM50C01 includes two set UART interfaces and provides SDK for Windows, Linux, and Android. It also supports the ONVIF standard protocol, along with OpenIPC and FPV firmware. This makes it highly convenient for secondary development and allows for quick integration into your projects.

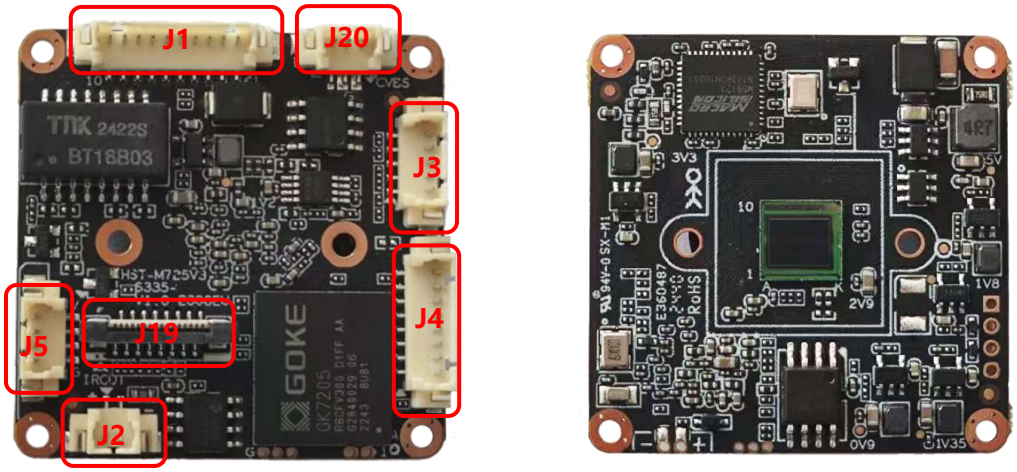
Key Features:

- 1/2.8” 5MP CMOS Sony IMX335
- Maximum resolution up to 2592x1944@30fps
- True Day/Night, 3D DNR, Digital WDR
- Supports network and CVBS analog video output
- Support humanoid detection, motion detection
- Support the Tuya P2P on Android, IOS(Not Default)
- Support two way audio, Built-in audio amplifier function
- Support ONVIF and HIK/XM protocol
- Support TCP/IP/HTTP/NTP/DHCP/SMTP/RTSP
- Open SDK(Linux,Windows), CGI,easily to be integrated with other digital systems
- Support OPENIPC development

Technical Specifications:

Image Sensor	
Sensor	1/2.8” 5MP Sony IMX335 CMOS
Maximum Resolution	2592x1944@30fps
Minimum Illumination	0.02lux @F1.0(Color) / 0.01 lux@F1.0 (B/W)
Camera	
AGC	Auto/Manual
S/N Ratio	≥50dB（AGC OFF）
Shutter Speed	1/2 - 1/20 ,000s,Slow shutter support
Wide Dynamic Range	Digital WDR≥73.7dB
Exposure Mode	Auto/ Manual/shutter mode
AWB	Yes
Day & Night	External control（IR Cut Filter）
Light Control	Support IR/White/dual light, three mode independent control
Compression	
Video Compression	H.265/H.264 Main Profile /M-JPEG
Audio Compression	G711U, G711A,PCM
Image Resolution	
Main Stream	2592x1944/1920x1080@30fps
Sub Stream	640x480/640x360@30fps
General Protocol	
Network Protocol	TCP/IP/HTTP/NTP/DHCP/SMTP/RTSP/P2P
ONVIF protocol	Yes
Compatibility	Support HIK/XM protocol
P2P	
Support TUYA APP	Support for Tuya APP（Android, IOS）(Not Default)
Function	
Web Configuration	Yes
0SD	Yes (Web OSD)
Motion Detection	Yes
Humanoid Detection	Yes
Reset	Support cable reset button(optional)
Amplifier	Built-in amplifier
Interface	
Wired	1ch 10/100 Base Ethernet,RJ45 interface
CVBS	Support
Audio	Microphone input/output
Alarm	2 ports input, 2 ports output
UART	Support
USB	Support
TF Card	Optional and max. 512G (reserved extended SD slot)
Other	
Power Supply	12VDC
Size/Weight	38x38mm /10g
Operation Temperature	-30°C~60°C
Working Humidity	≤90%RH(non-condensing)

Interface Pin Definition:



Interface	pin	Pin name	Functional parameter
J1	1	12VDC	DC power input, voltage range 9V-13.8V
	2	GND	GND
	3	ACT_LED	Network indicator light interface
	4	SYS_RST	Restore factory settings LOW valid
	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 -)
	9	UART1_TXD	Serial communication, sending TX
	10	UART1_RXD	UART1, receive RX
J2	1	IR-CUT＋	IRCUT signal +
	2	IR-CUT－	IRCUT signal-
J3	1	Alarm_in1	Alarm input 1
	2	Alarm_in2	Alarm input 2
	3	GND	GND
	4	Alarm_out1	Alarm relay output 1
	5	Alarm_out2	Alarm relay output 2
J4	1	MIC+	MIC+
	2	MIC-	MIC-
	3	SPK+	SPK+
	4	SPK-	SPK-
	5	GDS_IN	Hard light sensitive infrared
	6	IO_WL	Soft photosensitive white light
	7	IO_IR	Soft photosensitive infrared
	8	GPIO	8 preview GPIO (PWM not supported)
J5	1	3.3V	3.3V power supply
	2	USB_DM	data D-
	3	USB_DP	data D+
	4	GND	GND
J19	1-16	Expand	Expand TF card storage,RS485,Reset function
J20	1	CVBS	CVBS analog video output
	2	GND	GND
	3	DC 12V	DC power input, voltage range 9V-13.8V (reserve)