

IVG-G3C Module Specification

4MP HD AI Intelligent IP Camera Module · GOKE GK7205V210 dual-core DSP · Version 2026-04-16

Introduction

IVG-G3C is a 4MP HD AI intelligent IP camera module. 4MP imaging with low noise and dual-light full color delivers improved night vision and clearer faces. It supports human detection, face detection and H.265AI coding, and is mainly used in night-vision HD video surveillance cameras.

Main Features

CMOS	H.265AI	AI Noise Reduction	Human Detection
Face Detection	Lightning Protection	Automatic ICR	NPU

1. Product Parameters

Category	Item	Specification
Module	System structure	Embedded RTOS, dual-core 32-bit DSP, pure hard compression, watch dog
Module	Sensor	1/3" CMOS sensor, color 0.01 Lux @ F1.2, black/white 0.001 Lux @ F1.2
Module	Video compression	H.265AI (compatible with H.265/H.264), dual stream, AVI; 0.1M–10 Mbps variable; 1–30 f/s variable
Module	Image output	Main stream: 4MP (default) 2560×1440@25fps, 3MP 2304×1296@25fps, 2MP 1920×1080@25fps, 720P 1280×720@25fps; sub-stream: HD1 800×448@25fps, D1 704×576@25fps
Module	Shutter	1/50 (1/60) s to 1/10,000 s
Module	Lens	No (12 V standard voltage supply)
Module	Day and night	Supports IR-CUT; IR-CUT coil internal resistance 20 Ω, power-on current less than 200 mA; recommended 5 V standard IR-CUT
Image	Noise reduction	2D / 3D
Image	Wide dynamic	Digital WDR
Image	Auto iris	N/A
Interface	Audio compression	G.711, supports bidirectional talk, audio & video synchronization
Interface	Audio interface	1 audio input, MIC selection range –28 dB to –36 dB (–33 dB recommended); 1 audio output, no amplifier module — requires external amplifier to drive the speaker
Interface	Network interface	1 × RJ45 10/100M adaptive Ethernet; supports RTSP / FTP / DHCP / NTP / UPnP etc.
Interface	Extension interface	N/A
Interface	Signal interface	One photo-resistance interface, one IR-CUT interface; supports photo-resistance signal and IR-CUT linked to IR
Interface	Light panel interface	1 × infrared & white light control interface
Interface	Motor interface	N/A
Interface	Alarm I/O	0/1 (supports alarm output and alarm linkage, 3.3 V output)
Interface	WIFI interface	N/A
Interface	Reset interface	Supported (configurable as alarm input)

Category	Item	Specification
Interface	SD card	N/A
Intelligence	Intelligence analysis	Supports human detection and face detection; customization of other intelligent functions
Other function	Other functions	WEB, OSD, live video transmission, motion detection and IO alarm, front-end storage/playback/download, center reminder and image linkage, FTP capture; unified remote client monitoring software MYEYE; complete SDK
Other function	ONVIF	Supported
Other function	Mobile monitoring	Supports multiple mobile monitoring (iOS, Android)
General	Reliability	Comprehensive lightning protection; 7 × 24 hours –10 ■ to 65 ■ high-temperature stable and reliable testing
General	Power	DC 12 V / 2 A input, power consumption ≤ 3 W
General	Dimension	38 mm × 38 mm
General	Other	Supports POE power supply

2. Interface Description

Socket	Pin	Signal	Function
J5	1 / 2	IR-CUT	IR-CUT drive (+/-)
J44	1	W_LED_GPIO0_4	White light control
J44	2	R_LED_GPIO2_0	Infrared light signal control
J44	3	LED/GPIO6_5	Alarm output / indicator light
J44	4	GND	GND
J44	5	IRIN	Hard photosensitive input signal
J44	6	IO/GPIO6_4	Reset (configurable as alarm input)
J1	1 / 2	ETH_LINK_ACT_LED / ETH_LINK_STA_LED	Indicator light
J1	3 / 4	ETHTX+ / ETHTX-	Ethernet TX
J1	5 / 6	ETHRX+ / ETHRX-	Ethernet RX
J1	7	GND	GND
J1	8	12V	12 V input
J45	1 / 2	MICN / AC_IN	Audio input (-/+)
J49	1 / 2	SPKN / SPKP	Audio output (+/-)

3. Electrical Parameters

3.1 Absolute Electrical Parameters

Parameter	Description	Min	Max	Unit
Ts	Storage temperature	-40	150	■
VCC	Power supply voltage	9.6	14.4	V
ESD (Air)	TAMB = 25 ■	-4	4	kV
ESD (Contact)	TAMB = 25 ■	-4	4	kV

3.2 Working Conditions

Parameter	Description	Min	Max	Unit
Ta	Working temperature	-20	65	■
VCC	Power supply voltage	10.8	13.2	V