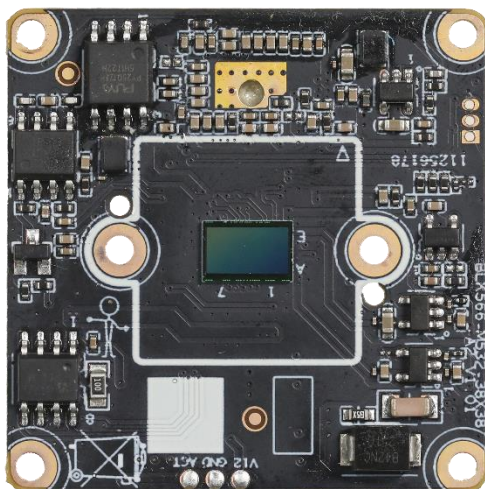


IVG-N8H Module Specification

Version: 20260117



Introduction

IVG-N8H is a 8MP Ultra HD Blacklight IP Camera Module, support human shape detection, face detection, car shape detection, support H.265AI coding, mainly used in night vision Ultra HD video surveillance camera.

Main Features



Blacklight



H.265AI



AI Noise Reduction



Human Detection



Face Detection



Vehicle Detection



NPU



Auto ICR



Lightning Protection

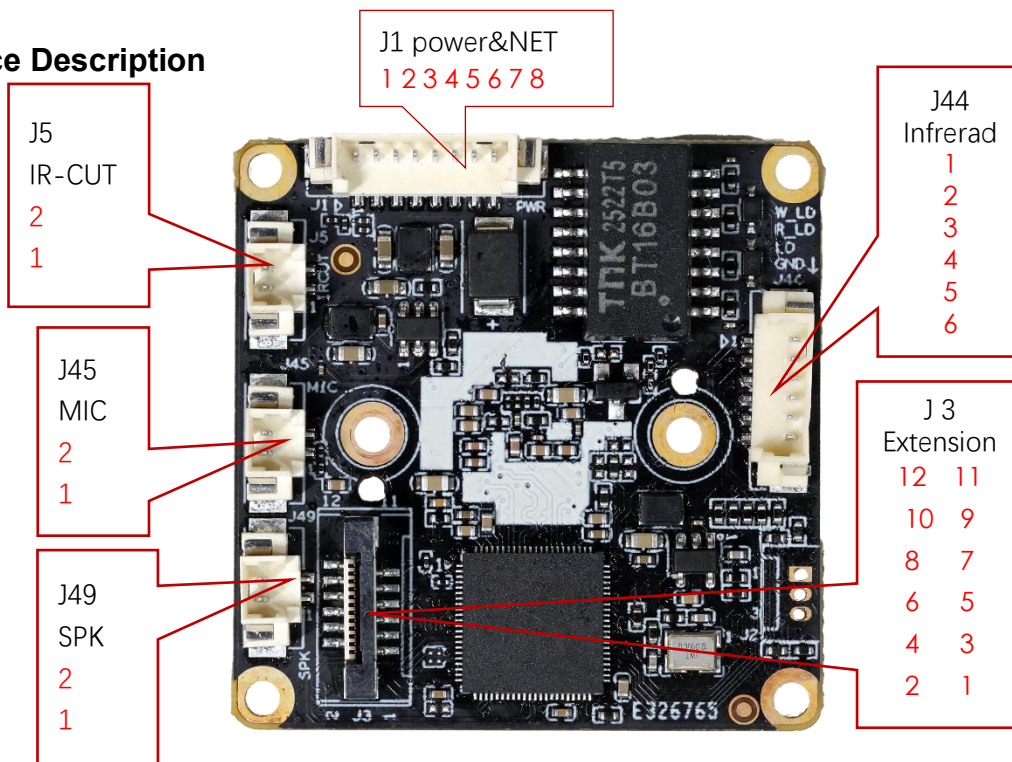
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1. Product Parameters

	Model	IVG-N8H
Module	System structure	Embedded Linux 64 DSP,pure hard compression ,watch dog
	Sensor	1/2.65" black light CMOS sensor, color 0.0001Lux@F1.2, black/white 0.0001Lux@F1.2
	Video compression	H.265AI(Compatible with H.265/H.264), support dual stream, AVI;0.1M~10Mbps variable;1~30f/s variable
	Image output	Main stream: 8MP 3840*2160@15fps; 5MP 2880*1616@25fps; 4MP 2560*1440@25fps; 2MP 1920*1080@25fps; sub-stream: 800*448@25fps
	Shutter	1/50(1/60) s to 1/10,000s
	Lens	N/A
Image	Noise reduction	Support 2D/3D
	Wide dynamic	Support digital
	Auto iris	N/A
Interface	Audio compression	G.711, Support bidirectional half duplex intercom,audio&video synchronization
	Audio interface	1 input, MIC: Selection range -28dB~-36dB, -33dB is recommended. 1 Output, Speaker: 8Ω2W is recommended.
	Network interface	1*RJ45 10/100M adaptive Ethernet port; support RTSP/FTP DHCP/NTP/UPnP etc
	Extension interface	Supports expansion of SD card, WIFI, and reset button
	Singal interface	One photo resistance interface,one IR-CUT interface ,support photo resistance signal and IR-CUT links to IR
	PTZ	N/A
	Alarm I/O	0/1
	WIFI interface	N/A (supports extensions)
	Reset interface	N/A (supports extensions)
	SD Card	N/A (supports extensions)
Intelligence	Intelligence analysis	Supporting Human shape detection, face detection, and support to customize other intelligent functions
Other function	Value-added Service	Support cloud storage, scene AI (elderly care, child care) and other value-added services, need to be opened at your own expense in the APP terminal.
	ONVIF	Support
	Mobile monitoring	Support multiple mobile monitoring (iOS, Android)
AI	Intelligent	Supports human detection, face detection, vehicle detection, and customization of other intelligent functions
General	Reliability	Comprehensive lightning protection, 7 * 24 hours -10℃ ~ 65℃high temperature stable and reliable testing
	Power	DC12V/2A input, power consumption: ≤3W
	Dimension	38mm*38mm
	Other	Support POE power supply

2. Interface Description



Specific No	Interface Description	Function	Socket
J5 IRCUT	1	IR-CUT	IR-CUT Control line
	2	IR-CUT	IR-CUT Control line
J2 Debug	1	UART0_RXD	Debug
	2	UART0_TXD	Debug
	3	GND	GND
J44 Infrared	1	W_LED_GPIO0_4	W_LED_GPIO0_4
	2	R_LED_GPIO2_0	R_LED_GPIO2_0
	3	LED/GPIO6_5	LED/GPIO6_5
	4	GND	GND
	5	IO/GPIO6_4	IO/GPIO6_4
	6	IO/GPIO1_7	IO/GPIO1_7
J1 Power&Ethernet	1	ETH_LINK_ACT_LED	LED/PHY_AD0
	2	ETH_LINK_STA_LED	LED/PHY_AD1
	3	ETH_TX+	Ethernet signal+
	4	ETH_TX-	Ethernet signal-
	5	ETH_RX+	Ethernet signal+
	6	ETH_RX-	Ethernet signal-
	7	GND	GND
	8	12V	12V INPUT
J45 MIC	1	MICN	MIC
	2	AC_IN	
J49 SPK	1	SPKN	SPK
	2	SPKP	
J3 Extension ports	1	SDIO0_CCLK_OUT	SDIO0_CCLK_OUT
	2	SD_DATA0	SD DATA0
	3	SD_DATA1	SD DATA1
	4	SD_DATA2	SD DATA2

	5	SD_DATA3	SD DATA3
	6	SD_CMD	SD_CMD
	7	WIFI_PDN	WIFI_PDN
	8	GND	GND
	9	WIFI_DN	WIFI_DN
	10	GND	GND
	11	WIFI_DP	WIFI_DP
	12	3V3	3V3

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
Static electricity discharge voltage (Air)	TAMB-25℃	-4	4	KV
Static electricity discharge voltage (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