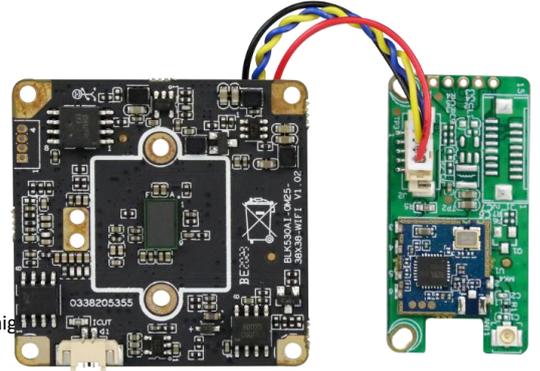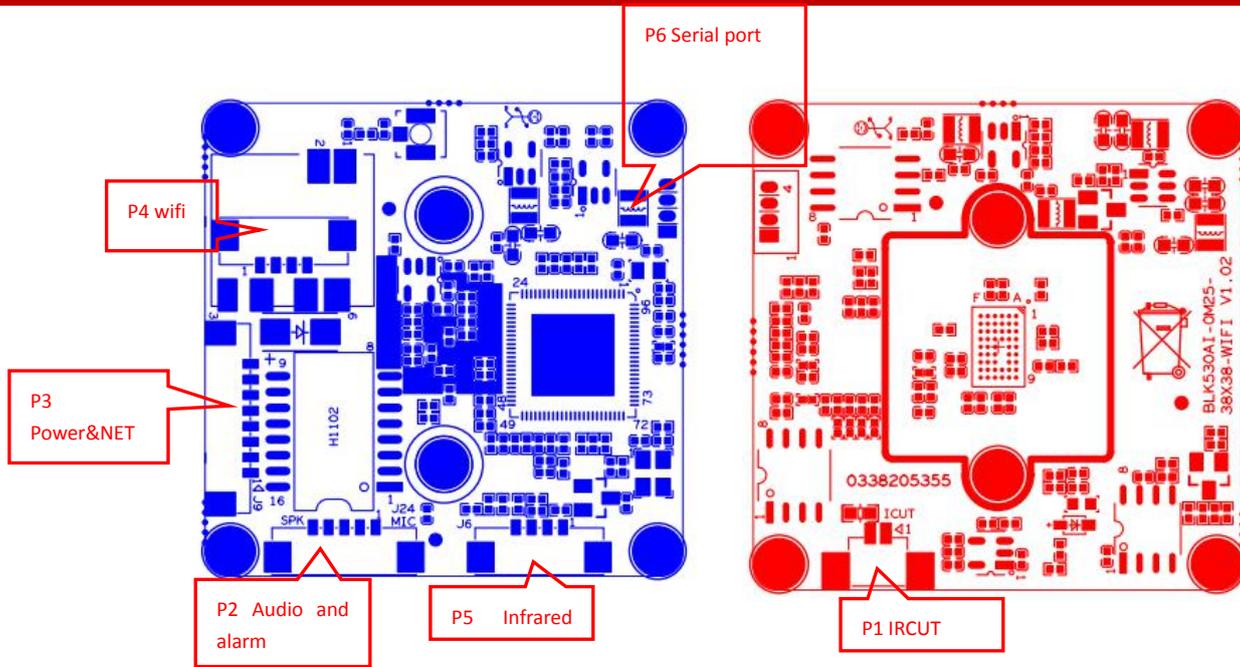# IPG-80X30PTA-WPNG
3.0M Wireline-WiFi IP camera Module

Features:

- Support 450m signal stable connection in open environment, excellent through wall performance WiFi chip, strong anti-interference
- Supporting human detection and face detection,support to customize intelligent functions
- 3.0M resolution,clear and fine images;
- Support for wired and wireless connections
- Support 2D/3D noise reduction,digital wide dynamic;
- Advanced H.265AI/H.265+(compatible H.265/H.264)video compression,Super low rate,high definition quality of image;
- Professional anti-lightning,conform to GB/T17626.5 and IEC61000-4-5；
- Support matching WIFI NVR board, recommend to cooperate with NBD8004S-UWG NVR board to achieve 450m;
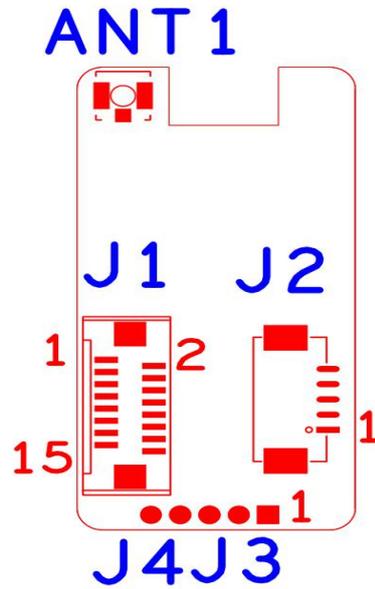
Parameters：

Model	IPG-80X30PTA-WPNG
System structure	Embedded RTOS, dual-core 32-bit DSP (XM530AI),pure hard compression ,watch dog
Sensor	3.0M 1/2.7"Q03 CMOS sensor,color 0.1Lux@F1.2,black/white 0.01Lux@F1.2
Video compression	H.265AI/H.265+(compatible H.265/H.264) coding,support dual stream,AVI;0.1M~6Mpbs variable
Image output	Main stream: 2304*1296@12fps 1920*1080@12fps; sub-stream: 640*360@12fps
Shutter	1/50(1/60)s to 1/10,000s
Lens	N/A
Day and night	Support IR-CUT,IR-CUT coil has an internal resistance of 20 ohms, the power-on time is less than 200ma, and the voltage is 3.5V-6V
Noise reduction	Support 2D/3D
Wide dynamic	Support
Auto iris	N/A
Audio compression	G.711 standard compression,support two-way Bidrectional Talk,support for audio and video synchronization
Audio interface	1ch input,level:2Vp-p,impedance:1kΩ,support sound pick-up input;1ch output,impedance:16Ω,30mw,support microphone;
Network interface	1 RJ45 Ethernet interface, 10/100M adaptive
Extension interface	N/A
Singal interface	one IR-CUT interface
PTZ	N/A
Motor interface	N/A
Alarm I/O	N/A
WIFI interface	Supports 450 meters wireless connections
Reset interface	N/A
SD Card	N/A
Reliability	Comprehensive lightning protection, 7 * 24 hours 65 ℃ high temperature stable and reliable testing
Intelligence analysis	Supporting human detection , and face detection,support to customizing other intelligent functions
Other function	Support IO alarm,front-end storage/playback/download, and center reminder and image linkage,support JPEG capture;perfect SDK;
ONVIF	Unsupport
Mobile monitoring	Unsupport
Power	DC5V-12V
Dimension	38mm*38mm+38mm*19mm
Other	The drive voltage of the light board is at 3.3V

Interface description table

Socket		Specific No	Interface Description	
P1	J5	1	IR-CUT	IR-CUT A OUT
		2	IR-CUT	IR-CUT B OUT
P6	J4	1	GND	GND
		2	UATRO_TXD	UATRO_TXD
		3	UATRO_RXD	UATRO_RXD
		4	BOOTSEL_0	BOOTSEL_0
P5	J6	1	PWM	PWM-OUT
		2	LED_CTRL	Infrared lamp control signal
		3	ADC1_IN	Infrared light signal control
		4	GND	GND
P3	J9	1	KEY_SET	KEY_SET
		2	LED/PHY_AD1	LED/PHY_AD1
		3	ETHTX+	ETHTX+
		4	ETHTX-	ETHTX-
		5	ETHRX+	ETHRX+
		6	ETHRX-	ETHRX-
		7	GND	GND
		8	12V 输入	MIC
P2	J24	1	MICN	MIC
		2	MICP	GND
		3	GND	GND
		4	SPKP	loudspeaker
		5	SPKN	loudspeaker

P4	J25	1	3V3	3V3
		2	WIFI_DN	WIFI DATA
		3	WIFI_DP	WIFI DATA
		4	GND	GND

Socket	Interface Description	Function			
J2	5P 1.25mm WIFI extension socket	1:GND	2:USB_DP	3:USB_DM	4:+3.3V
		5:USB_CTRL			
J1	16P double row FPC WIFI extension socket	1:NC	2:NC	3:NC	4:NC
		5:NC	6:NC	7:NC	8:GND
		9:NC	10:NC	11:GND	12:NC
		13:USB_DM	14:USB_DP	15:+3.3V	16:USB_CTRL
ANT2	IPEX antenna interface				
J4	Reserve pin header to expand WIFI interface				
J3	Reserve pin header to expand WIFI interface				