

N803

IP Camera Module — Product Specification



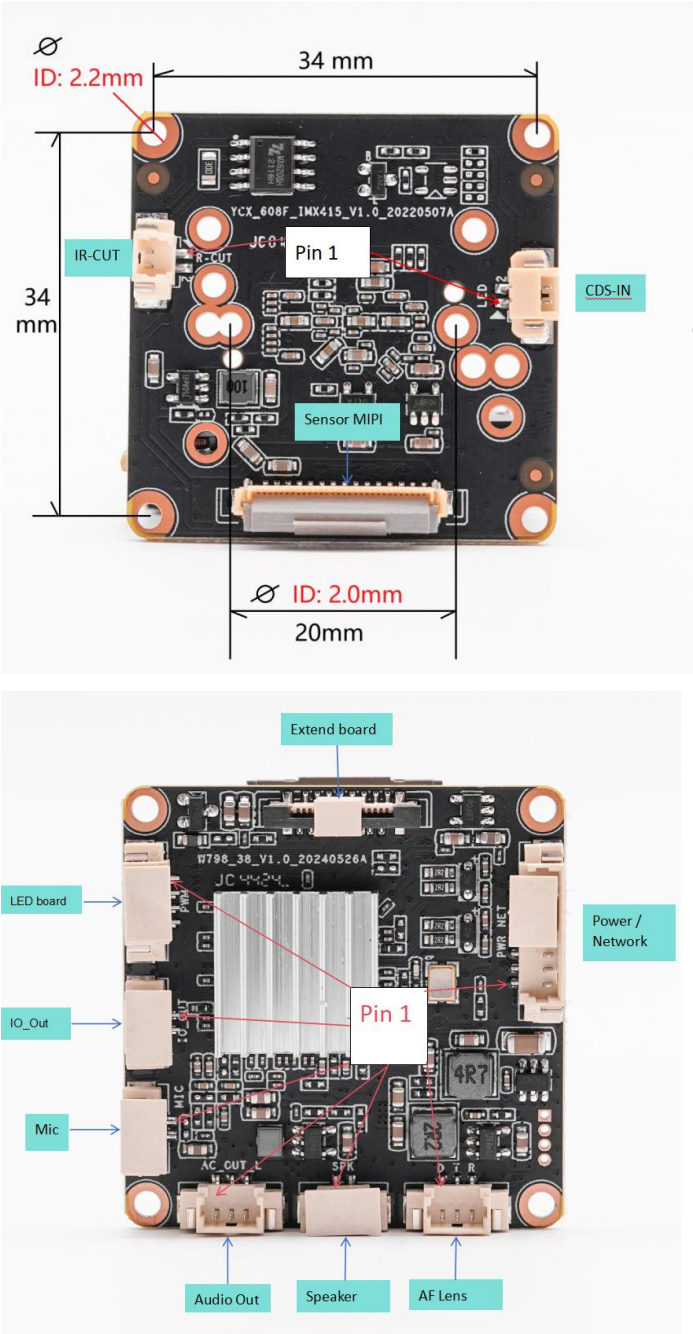
Specifications

Model	N803
Camera	
Image Sensor	1/2.8" 8MP Sony IMX415 CMOS
Soc Chip	SigmaStar SSC378QE
Effective Pixels	3840(H)×2160 (V)
Exposure Shutter	AUTO/Manual: 1/10s ~ 1/8000s, Max Shutter speed adjustable
Day/Night	Auto(Active/passive/schedule)/Day/Night, switch threshold, sensitivity, anti-flicker(Auto/50Hz/60Hz)
Image Adjust	Brightness,Saturation,Sharpness,Contrast,Denoise (0-100%) adjustable
White Balance	AWB/MWB
WDR	Yes
Light Mode	Smart(dual-light) / IR / White light, adjustable
Light Control	Auto/Manual, Brightness level (0-100%) adjustable
DNR	2D/3D DNR
Encode	
Video Standard	H.264/H.265/MJPEG
Video Resolution	Main Stream: 20fps@8MP(3840x2160)(default),30fps@6MP(3072x2048)/5MP(2592x1944)/4MP(2560x1440)/3MP(2304x1296)/1080P/720P Sub stream: 10fps@720P,30fps@D1(704x576)(default)/(720x480)/VGA(640x480)/640x360 *Third stream: 10fps@720P(default),30@D1(704x576)/(720x480)/VGA(640x480)/640x360 -- (when third stream customized enabled, Face Detection and Perimeter protection will be disabled) (*Note:MJPEG max 1080P)
Video Bitrates	Main stream: 64kbps-8Mbps Sub stream: 64kbps-2048kbps VBR/CBR , quality(1-9), GOP(1-128)
Snapshot	Main stream(HD)/Sub Stream(SD) snapshot
Image Rotation	0 / 90 / 180 / 270 degree adjustable
Border Crop	X crop, Y crop
Image Mirror	horizontal / vertical / horizontal & vertical adjustable

OSD Overlay	Font size(1-4), position,Time, Title, AM/PM, Color, User OSD, Alarm OSD
Privacy Mask	4 areas
Region of Interest	ROI: Each stream support 8 areas
Audio Standard	G.711-u/G.711-a/AAC, AEC
Led	
IR Led	External light board supported (not included)
White Led	External light board supported (not included)
Smart Control	Yes
Lens	
Focal length	fixed Lens/AF Lens
IR-CUT fixed position	L= 20mm, ID=2.0mm
Language	
Languages English, simplified Chinese, Chinese Traditional, Japanese, Korean, German, Polish, Italian, Turkish, Ukraine, Russian, etc.	
Smart Detection	
Motion Detection	Yes
Digital IO Alarm	1 pair Alarm-in/Alarm-out, normally open/normally close (optional)
Human Vehicle Detection	Yes, (2-20 meters)
Cross Line Detection	Yes, 4 lines
Perimeter protection	Yes, 4 areas
Face Detection	Yes, (1-5 meters)
Target Detection Type	Human Shape, vehicle, non-motor vehicle, Pet, Face (12px-1000px)
Trigger Action Linkage	Snapshot, Record, Relay(Red-blue Led flash) optional, White LED Flash, Voice siren, Micro-SD, Email, FTP, NAS storage (NFS)
Simultaneous Detection	Maximum 16 targets simultaneous detection
Storage Type	Schedule/Trigger: Micro-SD(512G) , Email, FTP, NAS(NFS)
Reset Button	Yes (with reset voice)
Network Services	
Protocol	HTTP(s)/RTSP/FTP/SMTP/DHCP/NTP/DST/RTP/RTMP/P2P/HiK/IPv4/IPv6/NFS/DDNS
IP Address Filtering	Yes (Allow list, Deny list)
P2P Mobile APP	Android, IOS
Web Access	IE, Firefox, Chrome, Edge, Safari, etc. (Windows/Linux/Mac/Chromebook/Tablet/Mobile phone)
PC Tool	Windows, Mac
ONVIF	23.12 compatible (profile S G T M)
General	
Network Port	100 Mbps Ethernet via external cable; PoE requires an external PoE board
Power Supply	12 VDC $\pm$ 10%
Power Consumption	< 2 W

Operating Temp.	-20°C-(+60)°C, 10%-90%RH
Suggest users	5
Optional Peripheral Equipment	
IR-CUT	5-12V, 25-60Ω, ID:2.0mm
Condenser Mic	28 - 30 dB
Fill-in Led	IR/White , pwm control
Red&blue Alarm light	IO-out control
Reset button	Yes (Active Low)
AF Lens Control	Yes
Extend Board	Alarm-in/Alarm-out/Memory card/Reset
Microphone Interface	Supports an external microphone (not included)
Speaker Interface	External speaker connection supported; speaker not included
External Accessories	Network cable, PoE board, microphone and speaker are external accessories and are not included with the bare module

Connection Diagrams & Pin Definitions



Connector pin pitch: 1.25 mm

Functions	Index	Pin definition	Description
CDS-IN	1	IR_DET	CDS in (passive mode, 1.5V-12V)
CDS-IN	2	GND	GND
IO_OUT	1	IO_OUT	Red&Blue Led (3.3V)
IO_OUT	2	GND	GND
Power/Network	1	DC 12V+	DC 12V+ (9.5V-15V)
Power/Network	2	GND	GND
Power/Network	3	RJ45_6	Network_RJ6
Power/Network	4	RJ45_3	Network_RJ3
Power/Network	5	RJ45_2	Network_RJ2

Power/Network	6	RJ45_1	Network_RJ1
Power/Network	7	Reset	Reset (Active Low)
Power/Network	8	LED1	Link active (3.3V)
Mic	1	MIC+	Mic (Condenser Mic)
Mic	2	MIC-	Mic (Condenser Mic)
IR-CUT	1	AOUT	IR-CUT+ (5-12V,25-60Ω)
IR-CUT	2	BOUT	IR-CUT- (5-12V,25-60Ω)
Speaker	1	SPK+	Speaker+ (Max:2W)
Speaker	2	SPK-	Speaker- (Max:2W)
LED board	1	+12V	12Vout
LED board	2	GND	GND
LED board	3	PWM1	IR led control (0-3.3V)
LED board	4	PWM0	White led control (0-3.3V)
Audio out	1	GND	GND
Audio out	2	L_OUT	Audio out
Audio out	3	SPK_EN	Amplifier IO (3.3V)
AF Lens	1	GND	GND
AF Lens	2	UART_TX	UART_TX
AF Lens	3	UART_RX	UART_RX
Extend Board	1	IOOUT	IO Output
Extend Board	2	IOINPUT	IO Input
Extend Board	3	SD_DET	SD detect
Extend Board	4	SD_D1	
Extend Board	5	SD_D0	
Extend Board	6	GND	
Extend Board	7	SD_CLK	
Extend Board	8	GND	GND
Extend Board	9	SD_CMD	
Extend Board	10	SD_D3	
Extend Board	11	SD_D2	
Extend Board	12	VDD	3.3V
Extend Board	13	RESET	Reset
Extend Board	14	V3.3	V3.3
Extend Board	15	V3.3	V3.3
Extend Board	16	V3.3	V3.3