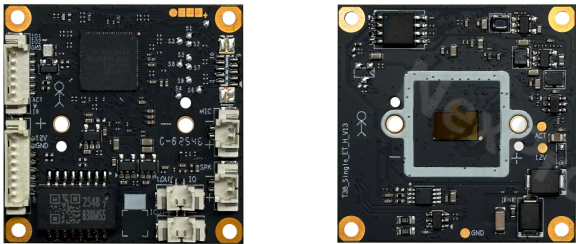


NexPro CORE-5MP-FMN38

5MP Full Moon Night IP Camera Core Module

Technical Specification Sheet



The AI-Ready 5MP Imaging Engine — Purpose-Built for Intelligent Bullet Cameras, Full Moon Night Color Performance, and Seamless System Integration

The NexPro CORE-5MP-FMN38 is a compact 38×38mm embedded mainboard that powers NexPro's mid-range intelligent bullet camera lineup. Built around a 5MP low-illumination CMOS sensor with F1.0-class full moon night sensitivity, integrated IR-CUT driver, dual PWM lamp control, and H.265+ triple-codec encoding, this module delivers crisp 2880×1620 video at a smooth 25fps — even under moonlight conditions. Native AI event linkage, bidirectional audio with 2W speaker drive, and comprehensive surge protection make it the go-to core for professional visible deterrent cameras. Operators access live view and playback via **Seetong Client** and **Seetong APP**, with all cloud services powered by **Seetong Cloud**.



Flexible Network Topologies

Topology 1	IPC — NVR — Seetong Cloud — Seetong Client
Topology 2	IPC — NVR — Seetong Cloud — Seetong APP
Topology 3	IPC — NVR — Seetong Client
Topology 4	IPC — Seetong Client (Direct)
Topology 5	IPC — Seetong Cloud — Seetong APP

Core Module Highlights

5MP Full Moon Night	Ultra-Low Power	Universal Connectivity	H.265+
2880×1620 @ 25fps, 0.1 Lux color @ F1.0, true day/night with synchronized IR-CUT	Compact 38×38mm footprint, single-board design	ONVIF Profile S, GB28181, P2P, RTSP — fully interoperable	Triple codec (H.265+/H.265/H.264), dual-stream with independent bitrate control

Technical Specifications

No.	Parameter	NexPro CORE-5MP-FMN38
1	System Architecture	Embedded Linux, single-core 32-bit DSP, pure hardware compression, watchdog timer, 8MB SPI-NOR Flash, 64MB DDR2
2	Image Sensor	5MP 1/2.7" CMOS; Color: 0.1 Lux @ F1.0 (Full Moon Night grade); B/W: 0 Lux (IR ON); Integrated IR-CUT driver with Sensor + IR-CUT + photosensitive + LED supplement synchronized control; True day/night switching
3	Video Processing	H.265+ / H.265 / H.264 encoding; Main stream bitrate: 500–8000kbps adjustable; Sub stream bitrate: 50–2000kbps adjustable
4	Frame Rate	5MP @ 25fps; Continuously adjustable 7–25fps
5	Image Output	Main Stream: 2880×1620 (default) / 2560×1440 / 2304×1296 / 1920×1080; Sub Stream: 800×448 / 640×480 / 640×360 (default) / 352×288
6	Audio Interface	1× audio input (supports microphone or line-in pickup); 1× audio output (supports 8Ω 2W speaker)
7	Audio Processing	G.711 codec; Bidirectional voice intercom; Audio-video synchronization
8	Network Interface	1× RJ45 10/100M adaptive Ethernet
9	Lamp Board Interface	2× PWM output control signals, supports 2 external LED drivers; PWM frequency: 24KHz
10	IR-CUT Interface	1× IR-CUT interface; Supported IR-CUT types: operating voltage 3.5–12V, internal resistance 20–45Ω; or operating voltage 3.5–6V, internal resistance 20Ω
11	Additional Signal Interfaces	1× red/blue strobe interface; 1× external audio amplifier IO

No.	Parameter	NexPro CORE-5MP-FMN38
12	Surge Protection	Power surge: 1.5KV throughput protection; Network surge: common mode 6KV, differential mode 1.5KV
13	Business Functions	On-Screen Display (OSD); Real-time video transmission; Motion detection alarm linkage; AI smart detection alarm linkage; Seetong Cloud services
14	Network Protocols	TCP/IP, IPv4, DHCP, RTSP, P2P, ONVIF, GB28181
15	Mobile Monitoring	iOS & Android support via Seetong Cloud
16	Power	DC 12V-2A input; Front-end power input: lightning surge, anti-static, reverse-polarity protection
17	Dimensions & Weight	38 × 38 mm, single-board 38 form factor; Net weight: ~8.7g
18	Operating Environment	-20°C ~ +55°C (-4°F ~ +131°F)

Resolution Reference Guide

Effective Pixels	Typical Resolutions
5MP	2880×1620 (default)
4MP	2560×1440
3MP	2304×1296
2MP (1080P)	1920×1080