



IP camera with GANZ AI analytics

PixelPro AI

| Model | ZNP-B5M212DP-A |
|--------------------------|---|
| Sensor | 1/2.8" CMOS --- IMX335 STARVIS |
| Sens. (AGC ON) | Color: 0.003lux @ F1.4 / IR ON: 0lux |
| Day/Night Mode | Auto IR-Cut |
| Electronic shutter | 1/5 – 1/5000 (Slow shutter - x2 / x4 / x8) |
| Iris | P-Iris |
| WDR | True WDR > 120dB |
| Noise Reduction | 2D / 3D-DNR |
| Lens | Motor-zoom z AF 2.8 – 12mm (96° ~ 30°) |
| IR Illuminator | 8 x IR LED, up to 50 meters |
| AV Compression | H.265 / H.264 / MJPEG / VBR+ / G.711U |
| Bitrate (CBR/VBR/VBR+) | Stream 1: 512 Kbps – 15 Mbit Stream 2 / 3: 512 Kbps – 8 Mbit |
| Resolution and framerate | 2592x1944 (30 FPS) 2592x1520 i 1920x1080 (30 FPS) |
| Streaming | Stream 1: maks. 2592x1944 (5MP) Stream 2 / 3: maks. 640x480 (VGA) Stream 4 (SVC): 1/2, 1/4, 1/8 |
| Image settings | Flip, Hue, Brightness, Contrast, Sharpness |
| Digital functions | HLC / BLC / Auto-ROI / DEFOG / Anty-Flicker |
| Corridor mode | N/A |
| Privacy mask | 4 zones |
| Events | Motion Detection (4 zones), PixelPRO AI video analytics |
| Network protocols | TCP, UDP, IPv4/6, HTTP/S, DHCP, FTP, SMTP, DNS, DDNS, NTP, RTP, RTSP, RTCP, Multicast Unicast, uPNP, WS-Discovery, SSL, PPPoE |
| RTSP support | Standard RFC2326 (VLC Player / QuickTime) |
| Security | User authorization, Hardware WatchDog |
| Compatibility | ONVIF, HTTP API |
| Ethernet | 10/100 Base-T, RJ45 |
| Audio | 1 x IN (RCA - F) / 1 x OUT (RCA - F) |
| Alarm | 1 x IN / 1 x OUT |
| Analog video OUT | N/A |

ZNP-B5M212DP-A

Features:

- **P-Iris** – precise iris control providing best video quality and Focus depth on full scene
- **AI analytics (Artificial Intelligence)** – *DeepLearning* algorithm provides instant and precise detection and classification of objects like person or vehicle.
- **VBR+** - dynamic video stream coding using QoS adaptation to optimize bandwidth utilization by 2-way renegotiation parameters between both network endpoints. Reduces network bandwidth by 20-30% comparing to standard VBR coding keeping same image quality.
- Sending test message „Keep-Alive” (ex. to Alarm Receiving Center) confirming that device is online.
- Option to install additional software licenses to enable special AI features like ANPR/LPR, behavior detection, safety monitoring etc.
- For one channel there can be enabled only one type of detection same time. For example when ANPR/LPR is enabled it excludes line crossing or intrusion detection.
- Device developed in South Korea.

AI analytics details:

| | |
|---|--|
| Features of AI engines (Artificial Intelligence) | Object detection by <i>Deep Learning engine</i> |
| | Classification: person, vehicle, bicycle (Detector) |
| | Multi-Object tracking simultaneously (Tracker) |
| Detection features | Intrusion, Occupancy, Loiter/Dwell, Zone IN, |
| | Zone OUT, Line crossing (direction), Stopping |
| Alarm filtering | Exclusion zones (masking), object size definition |
| Rules | Creating correlation between conditions and events |
| IP notifications | ONVIF, HTTP, HTTPS, TCP, E-mail, FTP |
| Reset button | Yes |
| SD card support | Micro SD / SDHC / SDXC card slot, max. 128GB |
| Power Input | 12V DC / 24V AC / PoE (802.3af / class-3) |
| Power consumption | 8W (IR-LED OFF) / 14W (IR-LED ON) |
| Power Output | 12V DC (100mA) |
| Working Temperature | -30°C ~ +50°C |
| Max. Humidity | 90% |
| Certificates and class | CE / FCC / IP67 / IK10 (housing) |
| Dimensions / weight | Ø 86 (housing) x 270 mm / 1120g |
| Rotation | 180° (H) / 180° (V) / 350° (Flip) |

Mounting adapters:



ZA8-JBMP-2
(E hole)

ZA8-CBK627B
only
combined with
ZA8-JBMP-2



ZA8-CBK627B

Compatibility:



PixelMASTER



DigiMASTER



CORTROL VMS



KRONOS Next!

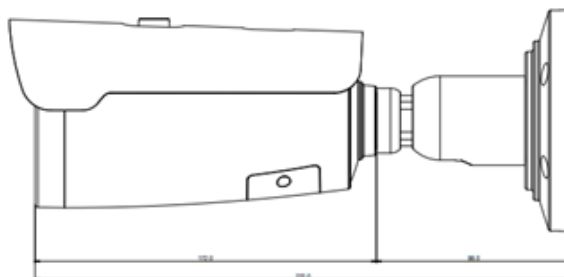


Safestar DMSI

Table showing detection distance (object size)

| Object class | Person | | Vehicle | |
|-----------------------------------|-----------|--------|-----------|--------|
| | Width | Height | Width | Height |
| Standard AI detection | 2,00% | 6,00% | 7,00% | 6,00% |
| Max. detection with 2.8mm (96° H) | 20 meters | | 20 meters | |
| Max. detection with 12mm (30° H) | 60 meters | | 60 meters | |

External dimensions:



Examples of vehicles groups possible to detects by AI as Vehicle class:

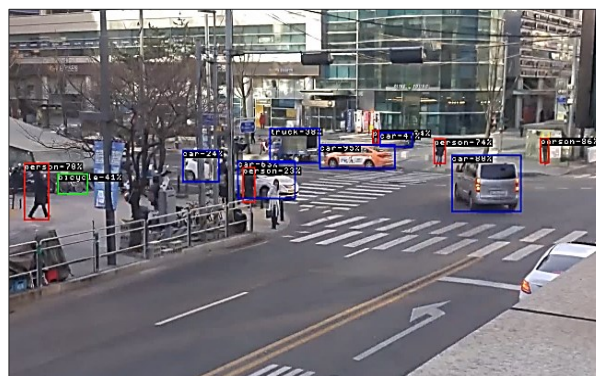
| Detected vehicles: | Non-Detected vehicles |
|---|--|
| <ul style="list-style-type: none"> Personal car Lorry (up to 3,5 ton) Bus, Autobus , Pickup TIR'y (Truck with trailer) Bicycle, Moto-bicycle i Motorbike | <ul style="list-style-type: none"> Digger and similar to it Forklift and similar to it Construction side vehicles Tractor and similar to it Quad and similar to it <p>Above vehicles cannot be detected by AI and classified as vehicle because of specific shape and textures which are very different from basic vehicle classes.</p> |



Flexible zones definition is possible



Multi-object tracking and classification even with huge traffic



Precise object classification on long distance