



## S Series

# IB9387-LPR-V2-W (V)

5MP License Plate Recognition  
Camera



## Technical Specifications

| System Information |                                 |
|--------------------|---------------------------------|
| CPU                | Multimedia SoC (System-on-Chip) |
| Flash              | 1GB                             |
| RAM                | 2GB                             |

| Camera Specifications   |                                                                                     |
|-------------------------|-------------------------------------------------------------------------------------|
| Image Sensor            | 1/2.8" Progressive CMOS                                                             |
| Max. Resolution         | 2560x1920 (5MP)                                                                     |
| Lens Type               | Motorized, Vari-focal, Remote Focus                                                 |
| Focal Length            | f = 3.2~10.5 mm                                                                     |
| Aperture                | F1.6 ~ F3.3                                                                         |
| Iris Type               | P-iris                                                                              |
| Field of View           | 97.3° ~ 27.9° (Horizontal)<br>70.3° ~ 20.9° (Vertical)<br>131.5° ~ 34.9° (Diagonal) |
| Shutter Time            | 1/5 sec. to 1/32,000 sec.                                                           |
| WDR Technology          | WDR Pro                                                                             |
| Day/Night               | Yes                                                                                 |
| Removable IR-cut filter | Yes                                                                                 |
| Illuminators            | 6100K White LED *4                                                                  |

|                               |                                                                                                           |
|-------------------------------|-----------------------------------------------------------------------------------------------------------|
| Minimum Illumination          | 0.06 lux @ F1.6 (Color)<br><0.005 lux @ F1.6 (B/W)<br>0 lux with IR illumination on                       |
| Tilt Range                    | 90°                                                                                                       |
| Rotation Range                | 180°                                                                                                      |
| Pan/Tilt/Zoom Functionalities | ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)                                                   |
| Storage                       | Built-in 32GB MicroSD card for LPR images<br>Slot type: MicroSD/SDHC/SDXC card slot<br>Seamless Recording |
| Built-in Installation Aids    | Remote focus, remote zoom                                                                                 |

| Video              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compression        | H.265, H.264, MJPEG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Maximum Frame Rate | 30 fps @ 2560x1920 (WDR on)<br>30 fps @ 2560x1440 (WDR on)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Maximum Streams    | 3 simultaneous streams                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Main Stream        | 30fps @ 2560x1920, 1600x1200, 1280x960, 640x480 (4:3);<br>30fps @ 2560x1440, 1920x1080, 1360x768, 1280x720, 640x360 (16:9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 2nd Stream         | 30fps @ 2560x1920, 1600x1200, 1280x960, 640x480 (4:3);<br>30fps @ 2560x1440, 1920x1080, 1360x768, 1280x720, 640x360 (16:9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 3rd Stream         | 30fps @ 1280x960, 640x480 (4:3);<br>30fps @ 1280x720, 640x360 (16:9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| S/N Ratio          | 60 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Dynamic Range      | 120 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Video Streaming    | Adjustable resolution, quality and constrained bit rate control, Smart Stream III                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Image Settings     | <p>General settings<br/>video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings</p> <p>Illuminators<br/>illuminators, anti-overexposure, Smart IR II</p> <p>Image settings<br/>white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR, EIS, scene mode (LPC-parking lots)</p> <p>Exposure<br/>BLC, HLC, exposure control (exposure level, iris adjustment, exposure time, gain control, iris mode), AE speed adjustment, WDR</p> <p>Focus<br/>zoom, focus</p> <p>Privacy mask<br/>Scheduled profile settings</p> |

| Audio            |                                                   |
|------------------|---------------------------------------------------|
| Audio Capability | Two-way audio                                     |
| Compression      | G.711, G.726                                      |
| Interface        | External Microphone input<br>External line output |

| Network |                                   |
|---------|-----------------------------------|
| Users   | Live viewing for up to 10 clients |

|           |                                                                                                                                                                                                                                                |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Security  | Access list, digest authentication, HTTPS , IEEE 802.1x, password protection, secure boot, signed firmware, Trend Micro IoT Security (brute force attack event, cyberattack event, quarantine event), user access log, user account management |
| Protocols | 802.1X, ARP, Bonjour, CIFS/SMB, DDNS, DHCP, DNS, FTP/SFTP, HTTP/HTTPS, ICMP, IGMPv3, IPv4, IPv6, NTP, PPPoE, QoS (CoS/DSCP), RTSP/RTP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS 1.2, UDP, UPnP                                                        |
| Interface | 10 Base-T/100 Base-TX Ethernet<br>*It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.                                                                                                  |
| ONVIF     | Profile G, S, T supported                                                                                                                                                                                                                      |

## AI Analytics

|                                    |                                                      |
|------------------------------------|------------------------------------------------------|
| Compute Capability                 | SoC with built-in hardware deep learning accelerator |
| Application available with license | VaxALPR                                              |

## Solution Integration

|                   |                                            |
|-------------------|--------------------------------------------|
| Embedded Software | VaxALPR                                    |
| VADP Package      | Trend Micro IoT Security (Default 3 years) |

## Alarm and Event

|               |                                                                                                                                                                                                                                             |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Event Trigger | Camera:<br>Event notification via digital output, email, HTTP, FTP, NAS server, SD card<br>File upload via email, HTTP, FTP, NAS server, SD card<br>VaxALPR Software:<br>FTP, JSON, XML, TCP Server, TCP client, wiegand protocol supported |
| Event Action  | Event notification via audio clip, camera link, digital output, email, HTTP, FTP/SFTP, NAS server, SD card<br>File upload via email, HTTP, FTP/SFTP, NAS server, SD card                                                                    |

## General

|                   |                                                                                                                                                                                                             |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connectors        | RJ-45 cable connector for Network/PoE connection<br>Audio line in<br>Audio line out<br>AC 24V<br>DC 12V<br>Digital input *2<br>Digital output *2 (Dry contact, load voltage 30V AC/DC, load current 1A max) |
| LED Indicator     | System power and status indicator                                                                                                                                                                           |
| Power Input       | AC 24V, DC 12V, IEEE 802.3at PoE Class 4                                                                                                                                                                    |
| Power Consumption | PoE: Max. 26W<br>DC 12V: Max. 29.5W<br>AC 24V: Max. 28W                                                                                                                                                     |
| Dimensions        | 118 x 118 x 294 mm                                                                                                                                                                                          |
| Weight            | 1,3 g                                                                                                                                                                                                       |

|                       |                                                                                                                                                                                                                                                                  |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Certifications        | EMC<br>CE (EN 55032 Class A, EN 55035), UKCA (BS EN 55032:2015+A11: 2020, BS EN 55035:2017+A11:2020, BS EN IEC 62368-1:2020+A11:2020), RCM (AS/NZS CISPR 32 Class A), FCC (FCC Part 15 Subpart B Class A), ICES (ICES-003 Issue 7), VCCI (VCCI-CISPR 32 Class A) |
|                       | Safety<br>UL (UL 62368-1 Ed.3), CB (IEC/EN 62368-1, EN 62471)                                                                                                                                                                                                    |
|                       | Environment<br>IK10 (IEC 62262), IP66/67 (IEC 60529)                                                                                                                                                                                                             |
|                       | IA<br>BIS (IS 13252, IEC 60950-1), BSMI (EMC: CNS15936)                                                                                                                                                                                                          |
| Operating Temperature | Starting Temperature: -10°C ~ 60°C (14°F ~ 140°F)<br>Working Temperature: -30°C ~ 60°C (-22°F ~ 140°F)                                                                                                                                                           |
| Humidity              | 90% (non-condensing)                                                                                                                                                                                                                                             |

## System Requirements

|                  |                                                     |
|------------------|-----------------------------------------------------|
| Operating System | Microsoft Windows 10/8/7<br>Mac 10.12 (Chrome only) |
| Web Browser      | Chrome 58.0 or above<br>Internet Explorer 10/11     |
| Other Players    | VLC: 1.1.11 or above                                |

## Included Accessories

|                  |                                                                                                                |
|------------------|----------------------------------------------------------------------------------------------------------------|
| Packing Contents | Quick installation guide, alignment sticker, L-shaped wrench, screw pack, waterproof accessory pack, sunshield |
|------------------|----------------------------------------------------------------------------------------------------------------|