# Spectrum S-B8-V11-F3

8MP Starlight IR Varifocal Bullet Network Camera

## Key Features

- 1/1.8” STARVIS™ CMOS, up to 8MP (3840 × 2160) @ 25/30 fps
- 3.6 to 11 mm motorized focal lens
- Supports face, human, and vehicle detection with snapshot capture
- Supports human and vehicle attribute analysis
- Intelligent analytics: Intrusion, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection, area people limit, perimeter detection, illegal parking, running detection, fall detection, fight detection, and people counting.
- True WDR (120dB), 3D DNR, ROI, Defog, HLC
- Smart IR illumination up to 80 m
- Built-in microphone, 1/1 audio I/O, 2/1 alarm I/O
- Built-in microSD card slot (up to 1 TB)
- Hardware Root of Trust with FIPS 140-3 Level 3 Certified Secure Element
- IP66 protection



NDAA Compliant | 5 YEAR WARRANTY | ONVIF | GMST

## Description

The Spectrum S-B8-V11-F3 is an outdoor, weather-resistant 8MP (4K) bullet network camera equipped with a high-sensitivity Sony STARVIS™ Starlight sensor for clear full-color performance in near-total darkness. It features a motorized varifocal lens with smart IR illumination extending up to 60–80 meters. Like its PTZ counterpart, it comes heavily integrated with deep-learning AI analytics to trigger snapshots and alerts for face, vehicle, and human perimeter breaches

## Optional Accessory




S-B8-PM
Pole Mount

- Compatible with the S-B8 bullet camera
- Fits poles from Φ100–152 mm (3.94–5.98 in)

# Specifications

## Spectrum S-B8-V11-F3

| Camera | |
|---|---|
| Image Sensor | 1/1.8" Sony CMOS Sensor |
| Max Resolution | 8MP, 3840 (H) x 2160 (V) |
| Shutter speed | 1/5 ~1/20,000 sec |
| Minimum illumination | Color: 0.003 Lux @ (F1.3, AGC ON),<br>B/W: 0.0008 Lux @ (F1.3, AGC ON), 0 Lux with IR ON |
| Day and Night | Auto (ICR) |
| Pan, Tilt & Rotate | P: 0° - 360° - T: 0° - 90° - R: 0° - 360° |
| **Lens** | |
| Lens Type | Varifocal lens, Motorized focal |
| Focal Length | 3.6 to 11 mm |
| Max. Aperture | F 1.3 |
| Field of View (FOV) | H: 115.9° to 48.4° - V: 59.7° to 27° |
| Iris | P - Iris |
| **IR Illuminator** | |
| Type | IR |
| IR Wave Length | 850 nm |
| Distance | Up to 80m (262.5 ft) |
| Control | Auto / Manual |
| **Video & Audio** | |
| Number of Streams | 3 Streams |
| Resolution | Stream1: 3840×2160, 2592×1944, 2592×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720<br>Stream2: D1, VGA, CIF<br>Stream3: VGA, CIF, QVGA |
| Frame Rate (Max) | Up to 25/30 fps |
| Bit Rate Control | CBR/VBR |
| Bit Rate | Stream1: 200 Kbps to 16 Mbps<br>Stream2: 100 Kbps to 6 Mbps<br>Stream3: 100 Kbps to 3 Mbps |
| Smart Encoding | Supported |
| Region of Interest (ROI) | Off/On (8 Zone, Rectangle) |
| Audio Compression | G.711 A-law, G.711 μ-law, RAW_PCM |
| Audio Bit Rate | 64 Kbps (G.711), 128 Kbps (RAW_PCM) |
| **Image** | |
| Image Adjustment | Brightness, Sharpness, Contrast, Saturation |
| Scene Mode | Indoor, Outdoor, Mirror, Corridor mode |
| Exposure Mode | Auto, Manual, Shutter priority |
| White Balance | Auto, Tungsten, Fluorescent, Daylight, Shadow, Manual |
| Day/Night Setting | Auto, Day mode, Night mode, Timer |
| Noise Reduction | 2D/3D DNR |
| Image Enhancement | HLC, BLC, Defog, WDR |
| Wide Dynamic Range | True WDR (120dB) |
| Privacy Masking | 4 areas |
| **Event** | |
| Alarm Triggers | IVS, Motion detection, Alarm input, Network alarm, Disk alarm, Day/Night switch alarm, Abnormal sound detection |
| Event Actions | Alarm record, Alarm output, FTP upload, SMTP upload, Snapshot, Audible alarm output |

| Intelligent Analytics | |
|---|---|
| AI Multi-Target Detection | - Supports face, human, and vehicle detection with snapshot capture<br>- Supports human and vehicle attribute analysis<br>- Supports tracking display modes: Full Frame, Four-Corner Frame, and Mosaic |
| Attribute Analysis | Human Attributes: Gender, age, glasses, hat, bag, upper clothing color & style, lower clothing color & style, reflective vest.<br>Vehicle Attributes: Type, color, brand, orientation. |
| Intelligent Analysis | Intrusion detection, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection, area people limit, perimeter detection, illegal parking, running detection, fall detection, fight detection<br>- Supports alarm triggering based on specified target types (human/vehicle) |
| People Counting | Supported |
| **Network** | |
| Protocols | IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPoE, RTSP/ RTCP/RTP, TCP/UDP, NTP, ARP, UPnP, FTP, SMTP, QoS, ICMP, IGMP, SMTP, 802.1x, SNMP, Multicast |
| Application Programming Interface | ONVIF (Profile S/T/G/M), SDK, CGI |
| Max Concurrent Streams | 10 channels |
| User/Host Level | 32+ users, 3 levels: Administrator, Operator, Media user |
| Web Viewer | <IE11, Chrome, Firefox, Microsoft Edge |
| **Interface** | |
| Network Interface | 1 × Ethernet (10/100 Base-T), RJ-45 connector |
| Built-in Microphone | Supported |
| Audio Interface | 1 input (3.5 mm), 1 output (3.5 mm) |
| Alarm Interface | 2 input, 1 output |
| SD Card Slot | Built-in microSD card slot (up to 1 TB) |
| Reset Button | Supported |
| **DORI Distance (EN 62676-4 standard)** | |
| Detect | 84 to 185 m (275.6 to 607.0 ft) |
| Observe | 33.6 to 74 m (110.2 to 242.8 ft) |
| Recognize | 16.8 to 37.0 m (55.1 to 121.4 ft) |
| Identify | 8.4 to 18.5 m (27.6 to 60.7 ft) |
| **Security** | |
| OS / Firmware Protect | Encrypted firmware, Secure boot, Signed firmware |
| User Authentication | Digest authentication, Brute-force attack protection |
| Network Authentication | IEEE 802.1X (EAP-TLS) |
| Secure Communication | HTTPS, WSS (WebSocket Secure), SRTP |
| Access Control | IP-based access control, Auto logout |
| Data Protect | Encryption credentials |
| Audit | Access, system, and event logs |
| Secure Storage | AES-256 encrypted SD card storage |
| Supply Chain Security | SBOM |
| Hardware Security | FIPS 140-3 Level 3 Certified Secure Element |

| General | |
|---|---|
| Materials | Aluminum alloy housing; PC components |
| Weight | Approx. 1.3 kg (2.87 lb) |
| Power Supply | 12 VDC / 24VAC / PoE (802.3af) |
| Power Consumption | Typical: 5 W (12 VDC), Max (IR on+ Focusing): 11.5 W (12 VDC) |
| Operating Conditions | -40°C to 60°C (-40°F to 140°F)<br>Humidity ≤ 95% RH (non-condensing) |
| IP Rating | IP66 |
| Language | English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English |
| Warranty | 5-year warranty - with registration |
| Certifications | CE-EMC<br>- EN 55032, EN IEC 61000-6-4, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130-4<br>FCC 47 CFR Part 15 Subpart B |
| Dimensions | 303 × 100 × 107 mm (11.9 × 3.94 × 4.21 inch) |