VB-M50B

Compact, lightweight and innovative PTZ camera with the ultra-low-light performance required in intelligence and evidence-gathering applications.
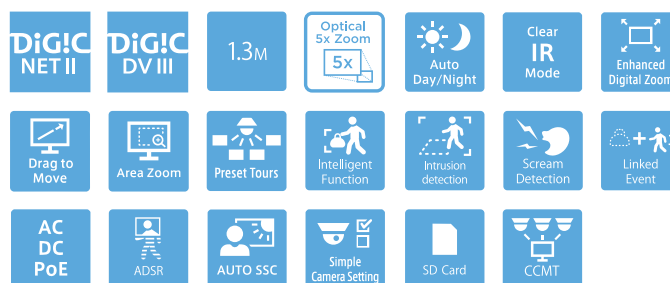
This lightweight 1.3MP PTZ camera boasts a large aperture Canon telephoto lens and a highly sensitive CMOS sensor that delivers exceptional detail in low-light conditions.

- Highly sensitive 1/3" 1.3MP CMOS sensor for exceptional low-light performance
- 5x optical wide aperture zoom lens with distortion-suppressing UD elements
- Unique Clear IR Mode and Motion-Adaptive Noise Reduction
- Enhanced Digital Zoom extends camera's zoom capabilities while maximising image quality
- 8 built-in analytics functions provide intelligent and efficient alarm detection
- Support for multiple web browsers and mobile devices
- Compact, lightweight PTZ design
- ONVIF® Profile S & G

Product Range

VB-R11
VB-H43
VB-M42

DiGiC NET II | DiGiC DV III | 1.3M | Optical 5x Zoom 5x | Auto Day/Night | Clear IR Mode | Enhanced Digital Zoom

Drag to Move | Area Zoom | Preset Tours | Intelligent Function | Intrusion detection | Scream Detection | Linked Event

AC DC PoE | ADSR | AUTO SSC | Simple Camera Setting | SD Card | CCMT

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Technical Specifications

VB-M50B

CAMERA

Image Sensor	1/3 type CMOS (primary color filter)
Number of Effective Pixels	Approx. 1.3 million pixels
Scanning Method	Progressive
Lens	5x optical zoom (20x digital zoom) auto focus lens
Focal Length	17.7 (W) – 88.5 mm (T)
F-number	F1.8 (W) – F2.4 (T)
Viewing Angle	**For 16:9 aspect ratios:** Horizontal: 15.6° (W) – 3.2° (T) Vertical: 8.8° (W) – 1.8° (T) **For 4:3 aspect ratios** Horizontal: 15.6° (W) – 3.2° (T) Vertical: 11.7° (W) – 2.4° (T)
Day/Night Switch	Auto/Day Mode/Night Mode
Min. Subject Illumination	Day Mode (colour): 0.04 lux Night Mode (monochrome): 0.002 lux - (F1.8, 1/30 sec., SSC off, 50IRE)
Focus	Auto/One-shot AF/Manual/Fixed at infinity
Shooting Distance (from front of lens)	Day Mode: 3.0 m (9.8 ft.) – infinity (W), 5.0 m (16.4 ft.) – infinity (T) Night Mode: 3.0 m (9.8 ft.) – infinity (W), 5.0 m (16.4 ft.) – infinity (T)
Shutter Speed	1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000, 1/16000 sec.
Exposure	Auto/Auto (Flickerless)/Auto (Shutter-priority AE)/Auto (Aperture-priority AE)/Manual (Shutter Speed, Aperture, Gain)
White Balance	Auto/Light Source/Manual Light Source: Daylight Fluorescent/White Fluorescent/Warm Fluorescent/Mercury Lamp/Sodium Lamp/Halogen Lamp Manual: One-shot WB/R Gain/B Gain
Metering Mode	Center-Weighted/Average/Spot
Exposure Compensation	9 levels
Smart Shade Control	Auto/Manual/Disable, Auto: 3 levels, Manual: 7 levels – Brightens shaded areas of a video
Haze Compensation	Auto/Manual/Disable, Auto: 3 levels, Manual: 7 levels
AGC Limit	6 levels
Image Stabilizer	2 levels (digital)
Motion-Adaptive NR	Available
Clear IR Mode	Available
Pan Angle Range	348° (±174°)
Tilt Angle Range	105° (ceiling-mounted position: -90° – +15°) – When the horizontal direction of the camera is 0°
Moving Speed	Pan: Max. 300°/sec. Tilt: Max. 300°/sec.

SERVER

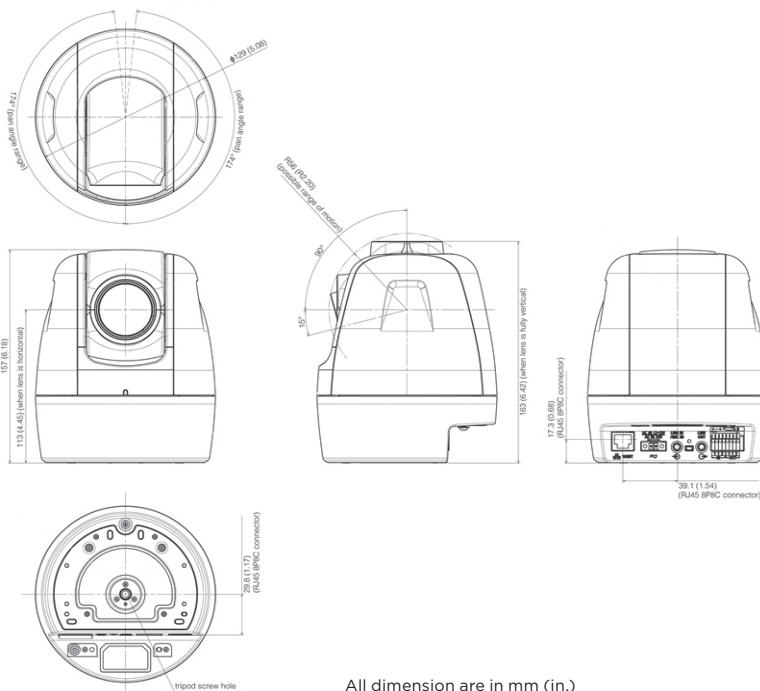|	
Video Compression Method	JPEG, H.264
Video Size	JPEG, H.264: 1280 x 720, 640 x 360, 320 x 180 1280 x 960, 640 x 480, 320 x 240
Video Quality	JPEG, H.264: 10 levels
Frame Rate	JPEG: 0.1 – 30 fps H.264: 1/2/3/5/6/10/15/30 fps – Values represent streaming performance from the camera. – The frame rate may be reduced due to Viewer computer's specs, the number of clients accessing at the same time, network loads, video quality setting, type or movement of the subject or other reasons. Maximum frame rate when streaming: H.264(1) (1280 x 720) and H.264(2) (1280 x 720) simultaneously: 15 fps H.264(1) (1280 x 960) and H.264(2) (1280 x 960) simultaneously: 15 fps
I-Frame Interval	0.5/1/1.5/2/3/4/5 sec.
Simultaneous Client Access	Max. 30 Clients + 1 Admin Client – H.264: Max. 10 Clients
Bit Rate Control	Target Bit Rate: 64/128/256/384/512/768/1024/1536/2048/3072/4096/6144/8192/10240/12288/14336/16384 kbps
ADSR: Area-specific Data Size Reduction	Number of Specified Areas: Max. 8 areas Data Size Reduction Level: 3 levels
Security	Camera Control: Administrator, Authorized user, Guest user (level of control varies depending on user) Access Control: User authority (user name and password), Host Access Restrictions (IPv4, IPv6) IEEE802.1X: EAP-MD5, EAP-TLS, EAP-TTLS, EAP-PEAP Encrypted Communications: SSL/TLS, IPsec
Protocol	IPv4, IPv6, TCP/IP, UDP, HTTP, FTP, SNMPv1/v2c/v3 (MIB2), DHCP, DNS, AutoIP, mDNS, ARP, ICMP, POP3, NTP, SMTP, RTP/RTCP, RTSP, SSL/TLS, IPsec, ONVIF, WV-HTTP (Canon proprietary)
Audio Compression Method	G.711 μ-law (64 kbps)
Audio Communication Method	Full-duplex (two-way)/half-duplex – Echo cancellation function compliant RTP, Sound Transfer Protocol by Canon

Audio File Playback	Available (audio files can be played back when an event is triggered by the intelligent function or external device input) – A third-party amplifier speaker is necessary
Privacy Mask	Number of registration: Max. 8 places, Number of mask colors: 1 (select from 9 colors)
Panorama	Available
View Restriction	Available
Preset	Number of registers: Max. 64 positions (+Home Position) Number of Preset Tour Route: Max. 5
Intelligent Function	Detection Types: Moving Object Detection, Abandoned Object Detection, Removed Object Detection, Camera Tampering Detection, Passing Detection, and Intrusion Detection Detection Settings: Max. 15 Non-detection Area Settings: Available
Intelligent Function	Volume Detection, Scream Detection
Event Trigger Type	External Device Input, Intelligent Function (Video), Intelligent Function (Audio), Timer, Day/Night Switch Number of Linked Events: 2 Linked Event Conditions: OR, AND (whether or not there is a sequence to events)
Image Upload	FTP/HTTP/SMTP (e-mail)
Event Notification	HTTP/SMTP (e-mail)
Log Notification	SMTP (e-mail)
Image Cropping Function	Digital PTZ Cropping sizes: 640 x 360/512 x 288/384 x 216/256 x 144/128 x 72 640 x 480/512 x 384/384 x 288/256 x 192/128 x 96
Enhanced Digital Zoom	Available
Maximum Digital Zoom	5x/10x/15x/20x
On-Screen Display	Available German/English/Spanish/French/Italian/Polish/Russian/Turkish/Korean/Chinese (Simplified) /Japanese
Daylight Saving Time	Available

INTERFACE

Network Terminal	LAN x 1 (RJ45, 100Base-TX (auto/full-duplex/half-duplex))
Audio Input Terminal (common for LINE IN & MIC IN)	Φ3.5 mm (Φ0.14 in.) mini-jack connector (monaural) LINE IN (connect to an amplifier microphone) or MIC IN (connect to a microphone w/o amplifier) – Switch LINE IN/MIC IN in the setting page.
Audio Output Terminal (LINE OUT)	Φ3.5 mm (Φ0.14 in.) mini-jack connector (monaural) LINE OUT (connect to an amplifier speaker)
External Device I/O Terminal	Input x 2, Output x 2
Memory Card	SD Memory Card, SDHC Memory Card, SDXC Memory Card Compatible. Recorded Content: Log, Video (Event, Manual, ONVIF, Timer, Upload) Frame Rate: Max. 1 fps (JPEG) Max. 30 fps (H.264) – To insure reliability in the recording speed, it is recommended to use CLASS 10 rated products. Even when using CLASS 10 products, reliability cannot be guaranteed during heavy access loads (e.g., when recording and deleting data at the same time).

OTHER

Operating Environment	Temperature AC, DC, PoE: -10°C – +50°C (+14°F – +122°F) Humidity 5% – 85% (without condensation)
Storage Environment	Temperature -30°C – +60°C (-22°F – +140°F) Humidity 5% – 90% (without condensation)
Installation Method	Ceiling mount/Desktop – Canon will not guarantee proper operation if the cameras are installed on surfaces where the angle is more than ±5° from horizontal or on walls, because this will put a heavy load onto sliding mechanical parts and may affect durability.
Power Supply	PoE: PoE power supply via LAN connector (IEEE802.3at Type1 compliant) AC Adapter: PA-V18 (100 – 240 V AC) (sold separately) External power source: 24 V AC/12 V DC
Power Consumption	PoE: Max. approx. 9.8. W* AC Adapter PA-V18: Max. approx. 11.2. W (100 V AC) Max. approx. 11.2. W (240 V AC) DC: Max. approx. 10 W AC: Max. approx. 9.6 W * Class 0 power sourcing equipment (requests 15.4 W)
Dimensions	(Φ x H) Φ129 x 157 mm (Φ5.08 x 6.18 in.) – Camera only
Weight	Approx. 1170 g (2.58 lb.)

Canon

VB-M50B

International Standard	EN55032 Class B, FCC part15 subpart B Class B, ICES-003 Class B, VCCI Class B, RCM AS/NZS EN55032 Class B, CNS13438 Class B, KN32 Class B, EN55024, KN35, EN50581 IEC/UL/EN60950-1, EN50130-4
APPLICATION	
Viewer	Camera Viewer Mobile Camera Viewer
Camera software	Camera Management Tool Recorded Video Utility
Language	German/English/Spanish/French/Italian/Polish/Russian/Turkish/Thai/Korean/Chinese (Simplified) /Japanese
Operating System/ Compatible Browser	Windows 7, Internet Explorer 11/Chrome 65 Windows 8.1, Internet Explorer 11/Chrome 65 Windows 10, Internet Explorer 11/Microsoft Edge/Chrome 65 Windows Server 2008, Internet Explorer 9 Windows Server 2008 R2, Internet Explorer 11/Chrome 65 Windows Server 2012, Internet Explorer 10/Chrome 65 Windows Server 2012 R2, Internet Explorer 11/Chrome 65 Windows Server 2016, Internet Explorer 11/Chrome 65
Verified Mobile Devices	Surface, iPad, iPhone, Nexus, Galaxy

Dimensions

All dimension are in mm (in.)

What's in the box?

- VB-M50B Main Unit
- Power Connector(L-type)
- Power Connector(Straight)
- Before Using this Camera
- EAC-Supported Guide
- Installation Guide
- Warranty Card
- Packaging

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Sales Start Date: May 2016

Product Details:

Product Name	Mercury Code	EAN Code
VB-M50B	1064C001AC	4549292065756

Measurement / Logistic Information:

Product Name	Mercury code	Pack type	Pack description	Quantity per pack	Length (mm)	Width (mm)	Height (mm)	Net Weight (kg)	Gross Weight (Kg)
VB-M50B	1064C001AC	EA	Each	1	180	228	207	1.2	1.7
		CT	Carton	6	564	436	264	7.0	
		EP	Euro Pallet	12				14.0	

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