

BL2002PID

Long range 2MP network bullet camera with PID

DESCRIPTION

The BL2002PID is an intelligent 2-megapixel IP bullet camera with built-in perimeter intrusion detection (PID). It is especially focused on perimeter surveillance applications, where traditionally the box camera would find purpose. Thanks to this model's long viewing range of up to 150m, including IR illumination. The PID function uses an AI algorithm, ensuring the highest accuracy possible. The long-range 4.7 to 71 mm (15x) motorized autofocus lens allows for a longer inter-camera distance, reducing materials cost. Intelligent video encoding ensures good image quality and low storage costs.

FEATURES

1/2.8 ultra-low light CMOS imager

2MP @ 60 fps (1920x1080)

Motorized zoom (4.7 - 71 mm)

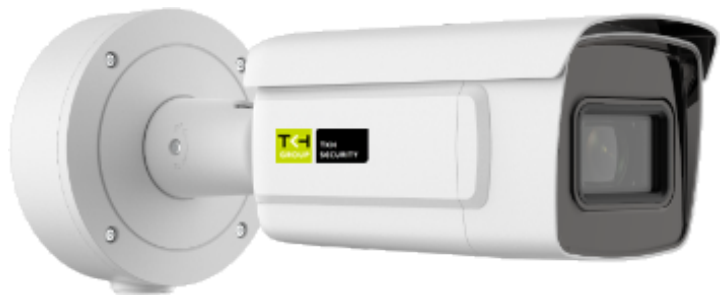
Includes AI Smart perimeter intrusion detection

Multi-codec multi-stream: 4x H.265, H.264, MJPEG

Built-in IR illuminator (up to 150 m)

IP67, IK10

ONVIF Profile S, G, T



Description

Long range perimeter intrusion detection

The BL2002PID is equipped with light sensitive optics to look into the far distance and detect perimeter intrusions over distances more than 100 meters away. This makes this camera a very cost effective alternative to the classic box camera application for fence surveillance. The smart AI-based virtual fence algorithm is specialized in detecting humans, which over time reduces the chance of false alarms.

Multi-encoder & multi-streaming

The camera is capable of simultaneous streaming 4 different H.265, H.264 and MJPEG streams. Streaming 2-megapixel full-HD (1920 x 1080) at up to 60 fps. Multiple combinations of resolution, frame rate, and encoding can be configured to satisfy different live viewing and recording scenarios.

High-Efficiency Video Coding (HEVC)

H.265 or HEVC is a video compression standard, the successor of H.264. In comparison, H.265 offers about double the compression ratio at the same level of video quality or substantially improved video quality at the same bit rate. Thus saving bandwidth and recording space.

ONVIF

Multiple options are available to easily integrate the BL2002PID into a video management system. In support of open standards, the BL2002PID is compliant with ONVIF (Profile S, Profile G, Profile T).

Image enhancement

The BL2002PID features a set of tools to enhance the image quality, such as smart IR, Defog, BLC, and 3D noise reduction.

Ease of installation

The BL2002PID is fitted with a built-in junction box to make installation easy and dismisses the need for an external junction box.

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Camera

Image Sensor	1/2.8" Progressive CMOS
Effective pixels	1920x1080 (2MP)
Minimum scene illumination	Color: 0.002lux, B/W: 0lux with IR illumination on, F1.4, AGC
Shutter Speed	1 sec. to 1/30,000 sec.
Lens	Motorized 4.7 to 71 mm, F/1.6, DC-iris
Field of View	57.7° to 3.66° horizontal, 33.2° to 2.75° vertical
Focus Control	Autofocus
Slow Shutter	Support
Day/Night	Automatic IR-cut Filter

Video

Video Compression	H.265 (Main Profile) / H.264 (High Profile/Main Profile/Base Profile) / MJPEG
Video Bitrate	32Kbps to 8Mbps
Max. Resolution	1920x1080 30fps
Supported Resolution	1920x1080, 1280x720, 704x576, 640x480
Frame Rate	25/30fps
Number of simultaneous streams	Four streams
Max. Streaming	
30fps*	1920x1080, 640x480, 1920x1080, 1280x720
30fps	1920x1080, 640x480
60fps(Shutter WDR OFF)	1920x1080
Bitrate Control	Constant bit rate (CBR), variable bit rate (VBR), Smart bitrate(H.265i, H.264i)**
Number of video output streams	Up to 20(RTSP)
Region of interest	Support
	*Monitor mode enabled. 3rd and 4th streaming are limited to 10fps.
	**Main Stream support

Image

Wide dynamic range	120dB
White Balance	Auto, Fixed, Manual
Image Setting	Saturation, Brightness, Contrast, Sharpness, Backlight Compensation, Highlight Compensation, WDR, Exposure control, Gain
SNR	52dB
Day/Night Switch	Auto/Scheduled/Triggered by Alarm In
Image Enhancement	3DNR, Defog, Lens Distortion Correction
Image Stabilization	Yes
Image Rotation	90°, 180°, 270° rotation
privacy masks	Support
Text and picture overlay	Date & time, Preset title, Image overlay with 128 128 24-bit BMP format

Analytics

Smart Analytics	Line crossing detection (or Perimeter Intrusion Detection - PID)* with classification of humans/vehicles
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Analytics

Other analytics	Motion detection (with classification of humans/vehicles), video tampering alarm, out of focus detection, scene changed detection, sound volume changed detection, intrusion detection*, region entrance detection*, region exit detection*
Event detections	External input, external output, tampering, recording notification, network connection lost, IP address conflicted, illegal login
Event actions	Alarm output, record video clip to NAS/SD card, send alarm message and image by E-mail/FTP, Send HTTP notification
	*Available on Smart Event mode.

Alarm

Input	2x (max. 24VDC, 1A)
Output	2x (max. 24VDC, 1A)
Operational modes	Motion detection, Tampering alarm, Alarm I/O, Smart Analytics Events

Network

Communication Interface	10/100/1000 Mb (RJ45)
Network protocols	IPv4/IPv6, HTTP, HTTPS (TLS1.2), 802.1x, QoS, FTP, SMTP(SSL), UPnP, SNMP(v1/v2/v3/Traps), DNS, DDNS, NTP, RTSP, RTCP, RTP/UDP, TCP/IP, IGMP(v2/v3), DHCP, PPPoE, SSL/TLS, SRTP, ONVIF Profile S/G/T, Siqua Programming Interface (SPI API)
Security	User authentication, Privilege Management, Digest authentication (RTSP, HTTP), HTTPS encryption (TLS1.1/1.2); SRTP, IEEE 802.1x port-based network access control, IP filtering
Web Viewer	Internet Explorer 11, Microsoft Edge, Google Chrome, Mozilla Firefox

General

Protection Level	IP67, IK10
Material	Die cast aluminum
Edge Storage	Built-in micro SD/SDHC/SDXC slot, up to 256 GB
Power	DC12V (terminal block), max. 10.8 W; PoE (802.3af), max. 12.9 W
IR illumination	850nm IR LEDs, max. 150m IR Viewable Length
Operating temperature	-30°C ~ 60°C (-22°F ~ 140°F)
Relative Humidity (Operating)	95% or less, no condensation
Storage temperature	-30°C ~ 60°C (-22°F ~ 140°F)
Relative Humidity (Storage)	95% or less, no condensation
Dimensions(camera body)	144 mm 140 mm 349.2 mm (5.7" 5.5" 13.7")
Weight	1.8kg
Colour	RAL 9003 (Signal white)

Ordering information

BL2002PID	Long range 2MP network bullet camera with PID
PM10	Pole mount, for BL/FD200xM1-EI, FD200xv2M, BL2002PID
PM10A	Pole mount, for BL200xv2M, BL2002PID

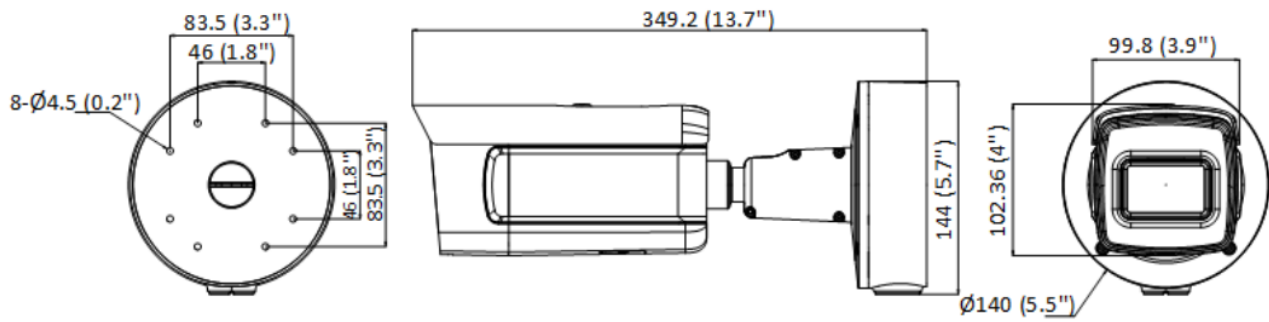
Specs



Ordering information

WM20

Corner mount, for 200xM/200xv2M series cameras, BL2002PID



Unit: mm (inch)

RELATED

**TKH Security PM10**

Pole mount, for BL/FD200xM1-EI, FD202xv2M, BL/FD200xM

**TKH Security PM10A**

Pole mount, for BL200xv2M, BL2002PID, BL202xM

**TKH Security WM20**

Corner mount, for 200xM, 200xv2M, 202xM