## PRO AI SERIES VVIP-2V-IZ-AI-PRO

### 2MP Pro Al IR Varifocal Network Dome Camera





#### Key Features

- ·1/2.8" 2Megapixel progressive scan STARVIS™ CMOS
- H.265 & H.264 triple-stream encoding
- ·25/30 fps@1080P (1920 × 1080)
- WDR (120 dB), Day/Night (ICR), 3D DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS (DSS/PSS) & DMSS
- ·2.7 mm-13.5 mm motorized lens
- ·1/1 Alarm in/out, 1/1 audio in/out
- ·Max. IR LEDs Length 40 m
- Micro SD memory, IP67, IK10

#### System Overview

Pro Al series contains Face Detection, Perimeter Protection and People Counting functions. Powered by deep-learning Artificial Intelligence algo- rithms, significantly improved accuracy. Meanwhile, the series features starlight and smart IR technology. This series fully protected from dust and water, certified to IP67 and vandal resistant to IK10 standard.

#### **Functions**

#### **Face Detection**

Face Detection is a software application that automatically captures faces from within a digital image or a video frame from a video source. Veilux cameras use advanced deep learning algorithms and are trained by a large number of face data sources, enabling the camera to locate faces quickly and accurately from the video source and capture facial images.

#### **Face Attributes**

Through the use of deep learning algorithms to analyze facial images, Veilux cameras can extract six facial attributes from each frame, including Age, Gender, Expression (Jolly/Surprise/Normal/Rage/Sad/Disgusted/ Confused/Frightened), Glasses, Mouth Mask, Mustache & Beard. Customers can acquire data of interest via face attributes statistics.

#### **Perimeter Protection**

Veilux's Perimeter Protection functions significantly improved accuracy. Perimeter Protection reduces false alarms and decreases pixel count requirements for object detection. Perimeter Protection features custom tripwires based on object type for automation in limited access areas such as pedestrian or vehicle-only zones. This combination of advanced Al analytics and real-time alerts to a desktop or to a mobile client reduces system requirements and resources resulting in greater surveillance system efficiency.

#### **People Counting**

People Counting function uses advanced image processing technology to capture depth information from within images. The camera pairs this information with deep learning algorithms to analyze and detect human bodies and track target objects in real time. The camera provides statistics for separate individuals' entrance and exit with up to 95% counting accuracy.

#### Metadata

Metadata is feature attribute information extracted from a target object which can be used for data retrieval. Veilux face detection camera can extract six facial attributes and output the metadata for analysis.

#### ePoE Technology

The ePoE technology of Veilux, designed internally, adopts advanced 2D-PAM3 coding modulation from physical layer, and realizes full duplex transmission over 800 meters at the speed of 10Mbps, or 300 meters at the speed of 100Mbps via Cat 5 or coaxial cable media. Besides, it sup-

ports PoE and PoC power supply technology which has greatly simplified construction and wiring. Veilux ePoE technology offer a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

#### Protection (IP67, IK10, wide voltage)

The camera allows for  $\pm 30\%$  input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), the camera is the choice for installation in even the most unforgiving environments.

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SPECIFICATIO	NS				
CAMERA					
Image Sensor		1/2.8" 2Megapixel progressive scan STARVIS™ CMOS			
Effective Pixels		1920 (H) × 1080 (V)			
RAM/ROM		512 MB/128 MB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual, 1/3 s–1/100000 s			
Minimum Illumination		0.002 Lux@F1.5			
IR Distance		Distance up to 50 m (164 ft)			
IR On/Off Control		Auto/Manual			
IR LEDs		4			
LENS					
Lens Type		Motorized vari-focal			
Mount Type		Board-in			
Focal Length		2.7 mm–13.5 mm			
Max. Aperture		F1.5			
Angle of View		H: 109°–30°, V: 57°–17°			
Aperture Type		Auto			
Close Focus D	istance	0.8 m (2.62 ft)			
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	44m(144ft)	18m(59ft)	9m(30ft)	4m(13ft)
	T	146m(479ft)	58m(190ft)	29m(95ft)	15m(49ft)
PAN/TILT/ROTA	ATION				
Pan/Tilt/Rotation Range		Pan: 0°-360°, Tilt: 0°-90°, Rotation: 0°-360°			
ARTIFICIAL IN	TELLIGEN	CE			
Face Detection		Support face image capture			
Face Attributes		Support 6 kinds of face attributes extraction: Age, Gender, Expression (Jolly, Surprise, Normal, Rage, Sad, Disgusted, Confused, Frightened), Glasses, Mouth Mask, Moustache & Beard			
Perimeter Protection		Tripwire, intrusion (Recognition of vehicle and people), fast moving, loitering detection, parking detection and people gathering			
People Counting		Support Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detection			
GENERAL INTE	LLIGENC	E			
Event Trigger		Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access,Storage anomaly			
General Intelligence		Object Abandoned/Missing			
Heat Map		Yes			
VIDEO					
Compression		H.265,H.264,H.264B,H.264H, MJPEG (sub stream)			
Smart Codec		Yes			
Streaming Capability		3 Streams			

Resolution	1080P (1920 × 1080)/1.3M (1280 × 960)/720P (1280 × 720)/D1 (704 × 576/704 × 480)/VGA (640 × 480)/ CIF (352 ×			
nesolution	288/352 × 240)			
	Main Stream: 1080P (1 fps-25/30 fps)			
Frame Rate	Sub Stream: D1 (1 fps-25/30 fps)			
	Third Stream: 1080P (1 fps–6 fps)			
Bit Rate Control	CBR/VBR			
Bit Rate	H.264: 32 Kbps-8192 Kbps H.265: 19 Kbps-7424 Kbps			
Day/Night	Auto(ICR)/Color/B/W			
BLC Mode	BLC/HLC/WDR (120 dB)			
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual			
Gain Control	Auto/Manual			
Noise Reduction	3D DNR			
Motion Detection	Off/On (4 Zone, Rectangle)			
Region of Interest	Off/On (4 Zone)			
Electronic Image Stabilization (EIS)	Yes			
Smart IR	Yes			
Defog	Yes			
Flip	0°/90°/180°/270°			
Mirror	Off/On			
Privacy Masking	Off/On (4 Area, Rectangle)			
AUDIO				
Compression	G.711a, G.711Mu, AAC, G.726, G.723			
NETWORK				
Ethernet	RJ-45 (10/100 Base-T)			
Protocol	IPv4;IPv6;HTTP;HTTPS;TCP;UDP;ARP;RTP;RTSP;RTCP; RTMP;SMTP;FT-P;SFTP;DHCP;DNS;DDNS;QoS;UPnP;NTP;Multicast;ICMP;IGMP;NFS;PFPE:802.1x;SNMP			
Interoperability	ONVIF (Profile S/Profile G/Profile T), CGI, Milstone, Genetec, P2P			
Streaming Method	Unicast/Multicast			
Max. User Access	20 Users			
Edge Storage	NAS;FTP;SFTP Micro SD card 256 GB			
Web Viewer	IE (versions newer than IE8), Chrome, Firefox, Safari (versions newer than Safari 12)			
Management Software	Smart PSS, DSS, DMSS			
Smart Phone	iOS, Android			
CERTIFICATIONS				
Certifications	CE-LVD: EN60950-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B			
INTERFACE				
Audio Interface	1/1 channel In/Out			
RS485	N/A			
Alarm	1 channel In: 5mA 5V DC 1 channel Out: 300mA 12V DC			

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ELECTRICAL				
Power Supply	<b>er Supply</b> DC 12V (±30%), PoE (802.3af) (Class 0)			
<b>Power Consumption</b>	<10.3W			
ENVIROMENTAL				
Operating Conditions	-30° C to $+60^\circ$ C (-22° F to $+140^\circ$ F)/Less than 95% RH			
Storage Conditions	-30° C to +60° C (-22° F to +140° F)			
Vandal Resistance	IK10			
Ingress Protection	IP67			
CONSTRUCTION				
Casing	Metal			
Dimensions	159.0 mm × 117.9 mm (6.26" × 4.64")			
Net Weight	0.95 kg (2.09 lb)			
Gross Weight	1.20 kg (2.65 lb)			

#### Dimensions

