The Defender R30 is a high-performance bi-spectral PTZ surveillance system designed for ultra-long-range target monitoring beyond 10km. Ideal for demanding environments such as offshore platforms, skyscrapers, borderlines, and critical infrastructure, the R30 offers exceptional surveillance with advanced imaging systems, powerful tracking capabilities, and robust protection.

Features

Ultra Long-Range Surveillance

- 4MP 15-775mm super telephoto visible camera for clear and detailed long-range images.
- Max optional VGA(640x512) 30-150mm thermal imaging camera for 24/7 monitoring, regardless of lighting conditions.
- AI-ISP technology optimizes image quality, enhancing low-light performance and dynamic range, detail and color reproduction.

Comprehensive Protection

- Built-in wiper and heater for harsh weather conditions.
- IP66 protection rating for dust and water resistance.
- 6000V surge protection for equipment safety.

Excellent OIS

- Optical image stabilization technology effectively compensates for camera shake and keeps the image stable and clear even in harsh environments.

Accurate Tracking

- With a maximum speed of 40°/s and a minimum speed of 0.01°/s, and an ultra-high preset point accuracy of 0.01°, it enables easy and precise target tracking.

AI Analytics

- AI-based intelligent detection, recognition, and tracking of targets for improved monitoring efficiency.

Easy Integration

- Single IP integration of multi-spectral systems for simplified deployment.
- Supports ONVIF standard protocols for compatibility with various surveillance systems.

Technical Specs

Visible Camera

Image Sensor	1/1.8" STARVIS progressive scan CMOS
Resolution	2688 x 1520, 4MP
Lens	15-775mm, 52x motorized zoom, F2.8-8.2
	Field of view: 29.1°x 16.7°(H x V)-0.5°x 0.3°(H x V)
	Near focus distance: 1-10m
	Zoom speed: <7s(Wide-Tele)
	Focus modes: Semi-auto/Auto/Manual/One-push
Min. illumination	Color: 0.01Lux, B/W: 0.001Lux, AGC&AI-NR ON, F2.8
Electronic Shutter Speed	1/1-1/30000s
Noise Reduction	2D/3D/AI-NR
Image Stabilization	EIS & OIS
Day/Night	Auto(ICR)/Manual
White Balance	Auto/Manual/ATW/Indoor/Outdoor/Sodium Lamp/Streetlight/Natural
WDR	120dB
Defog	Optical (NIR) + Digital
Anti-heatwave	Auto/Manual
Digital Zoom	16x

DORI Ratings*	Detection	Observation	Recognition	Identification
	12320m	4889m	2464m	1232m

The DORI standard (based on the IEC EN62676-4:2015 international standard) defines different levels of detail for detection (25PPM), observation (62PPM), recognition (125PPM), and Identification (250PPM). This table is for reference only and performance may vary depending on the environment.

Thermal Camera

Imager Sensor	Un-cooled FPA Vanadium Oxide microbolometer
	Pixel pitch: 12μm
	Spectral range: 8-14μm
	Sensitivity (NETD): <50mK
Resolution	640 x 512, VGA
Lens	30-150mm, 5x motorized zoom, F/0.85-F/1.2
	Field of view: 14.7°x 11.7°(H x V)-2.9°x 2.3°(H x V)
	Zoom speed: <3s(Wide-Tele)
Focus Modes	Semi-auto/Manual/One-push
Color Modes	White hot, Black hot, Fusion, Rainbow, etc. 20 user-selectable
Image Stabilization	EIS
Digital Zoom	8x

DRI Ratings*	Detection	Recognition	Identification
Human (1.7 x 0.6m)	6250m	1563m	781m
Vehicle (1.4 x 4.0m)	19167m	4792m	2396m

The DRI distances are calculated according to Johnson criteria: detection(1.5 or more pixels), recognition(6 or more pixels), identification(12 or more pixels). This table is for reference only and performance may vary depending on the environment.
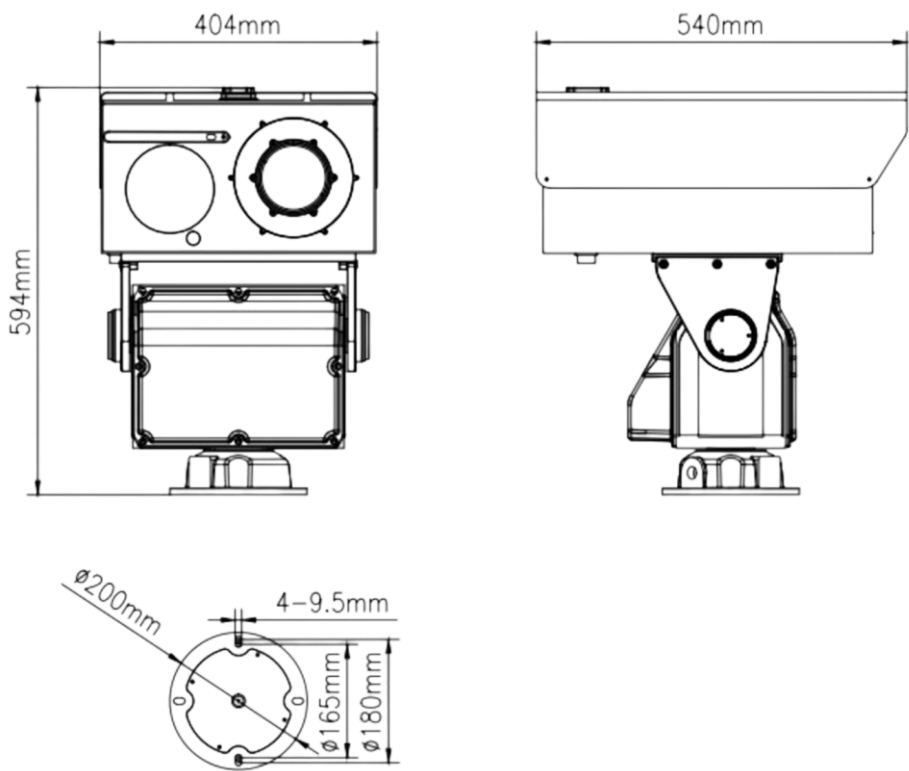
Pan/Tilt

Pan	Range: 360° continuous rotation Speed: 0.01°- 40°/s
Tilt	Range: -45° to +45° Speed: 0.01°-20°/s
Positioning Accuracy	0.01°
Preset	256
Tour	8, Up to 32 presets per tour
Scan	4
Pattern	4
Park	Preset/Tour/Scan/Pattern
Scheduled Task	Preset/Tour/Scan/Pattern
Power-off Memory	Support
Snap Positioning	Support
Proportional P/T to Zoom	Support
Heater/Fan	Integrated, Auto/Manual
Wiper	Integrated, Manual/Scheduled

Video and Audio

Video Compression	H.265/H.264/H.264H/ H.264B/MJPEG
Main Stream	Visible: 25/30fps (2688 x 1520, 1920 x 1080, 1280 x 720), 16fps@MJPEG Thermal: 25/30fps (1280 x 1024)
Sub Stream	Visible: 25/30fps (1920 x 1080, 1280 x 720, 704 x 576/480) Thermal: 25/30fps (704 x 480)
Image Encoding	JPEG, 1-7fps (2688 x 1520)
OSD	Name, Time, Preset, Temperature, P/T Status, Zoom, Address, GPS, Image overlay, Abnormal info
Audio Compression	AAC (8/16kHz)，MP2L2(16kHz)

Network

Network Protocols	IPv4, IPv6, HTTP, HTTPS, TCP, UDP, RTSP, RTCP, RTP, ARP, NTP, FTP, DHCP, PPPoE, DNS, DDNS, UPnP, IGMP, ICMP, SNMP, SMTP, QoS, 802.1x, Bonjour
API	ONVIF(Profile S, Profile G, Profile T), HTTP API, SDK
User	Up to 20 users, 2 level: Administrator, User
Security	User authentication (ID and password), IP/MAC address filtering, HTTPS encryption, IEEE 802.1x network access control
Web Browser	IE，EDGE，Firefox，Chrome
Web Languages	English/Chinese
Storage	MicroSD/SDHC/SDXC card (Up to 1Tb) edge storage, FTP, NAS

Analytics

Perimeter Intrusion Detection	Tripwire, Virtual Fence, Area Intrusion
Object Classification	Human & Vehicle Detection and Classification
Fire Prevention	Fire & Smoke Detection, Smoking & Calling Detection

Abnormal Behavior Detection	Loitering Detection, Fast Moving, Crowd Gathering, Parking Detection, Abandoned Object, Missing Object
Auto Tracking	Multiple detection tracking modes
Interface	
Alarm Input	7-ch
Alarm Output	2-ch
Audio Input	1-ch
Audio Output	1-ch
Ethernet	1-ch RJ45 10M/100M
RJ485	1-ch
General	
Casing	IP 66
Power	48V DC, typical 80, max 210w, DC48V Power adapter included TVS 6000V, Surge protection, Voltage transient protection
Operating Conditions	Temperature: -40℃ to +70℃/-22℉-158℉, Humidity: <90%
Dimensions	494*594*540mm (W×H×L)
Weight	75kg

Ordering Information

Model No.	Description
VS-PTZ4052YIO-RV61505-R30	4MP 775mm OIS Long-range Bispectral VGA Thermal Heavy-duty Positioning Camera

Dimensions

20th Floor, Block 9, Chunfeng Innovation Park
Binjiang, Hangzhou, China
Tel: +86-571-88063872
sales@viewsheen.com
www.viewsheen.com

VISHEEN

Sep 2024 | Rev 2