

CCTV | IP PTZ

X4 COMMANDER Bi-Spectral



Key Features

- Dual Visible and Thermal PTZ Camera
- 640 x 512 Thermal Resolution, $\leq 20\text{mK}$ NETD
- Tough, Rugged Camera, Marine-Grade Finish as Standard
- Dual HD Streaming – Visible Sensor
- Adaptive White Light and IR (zoom-linked) Operation – 500m Target Range.
- VMS Integration, Including Redvision VMS1000
- 40:1, 1/1.8" CMOS Starlight Sensor
- Brushless Stepper Motors for Resilience
- Rain Sensor for Automatic Wiper Control
- ONVIF (Profile G, T & M) Compliant
- SD Card Recording Option, up to 1TB.

X4 COMMANDER Bi-Spectral Rugged PTZ

The Bi-Spectral X4 COMMANDER is an advanced, rugged PTZ surveillance camera that combines high-performance visible imaging with cutting-edge thermal detection in a single integrated unit. Designed for mission-critical applications where all-condition awareness is essential, the Bi-Spectral offers unmatched flexibility, situational awareness, and target detection.

At its core, the Bi-Spectral features a dual-sensor configuration, seamlessly blending a high-definition visible camera with a Vanadium Oxide uncooled thermal imaging sensor. The thermal sensor offers a resolution of 640×512, with images scalable up to 1920×1080, delivering detailed thermal imagery even at long range. The 12µm pixel pitch and ≤20mK thermal sensitivity ensure accurate heat detection and contrast, even in challenging weather or low-visibility environments.

Available with a choice of fixed thermal lenses - 9mm, 15mm, 25mm, or 50mm - the Bi-Spectral can be tailored to suit specific operational needs, from wide-area monitoring to long-range target detection. This thermal capability is complemented by the Bi-Spectral's powerful visible-spectrum optics, offering precise PTZ control, low-light performance, and smart tracking features.

Intuitive, Operator Control

The Bi-Spectral has intuitive, operator control, from pan and tilt speeds of up to 50° / second to speeds of less than 0.1° / second, for when an operator is precisely tracking a target. The Bi-Spectral also features long-life, super-efficient, white-light and IR LED illumination technologies, for night-time operation.

3D positioning allows operators simple control of the Bi-Spectral PTZ. Quick and simple setup directly from the Bi-Spectral's Web User Interface; or tracking targets by mouse click from a compatible control platform, latency and over run are no longer an issue.

VMS Integration Including Digifort

Digifort is an ONVIF-compliant VMS that can be used to manage a wide range of IP cameras, with an enhanced SDK level integration into all Redvision's cameras. This level of integration provides users with simple access to the cameras auxiliary commands, including wiper and white light control.

Simple Install, Maintenance Free

The Bi-Spectral is designed for easy installation and configuration. A complete range of brackets, mounts and cable extensions allow upright or hanging installation in any environment, with a choice of RAL colour options to order. Cantilever arms enable the camera to view directly downwards on pole or tower mounts.

The Bi-Spectral mounting bracket has a 4" PCD mount with M8 clearance holes. A complete range of brackets, mounts and cable extensions are also available, which are zinc plated then powder coated.

The Bi-Spectral utilises a tooled silicone wiper option to keep the camera's view through the flat, scratch-resistant window free of water and dirt. A linkage-free, sprung steel mechanism reduces wiper wear and a polycarbonate window gives an even tougher option. Wiper activation is by a button press on VMS systems, including Digifort, or by pre-set.

Extensive Features

The Bi-Spectral has an extensive range of features including four video streams for recording, visualisation, set-up and servicing; H265, H264 and MJPEG compression; optional 1TB maximum SD card-based edge storage; ONVIF compliance to Profile G, T and M; 400 pre-sets, 12 tours, 12 scans, 6 tracks and 20 privacy masks; alarms, motion detection, intelligent analytics, image fusion; and its operating temperature range is -40°C to 70°C.

Night-Time Performance

The Redvision Bi-Spectral X4 COMMANDER rugged, ball PTZ cameras have infra-red (IR) and white light illumination options, using long-life, super-efficient LEDs. Night time visible camera tests show that the Bi-Spectral performs up to 500m.

The Bi-Spectral has Osram adaptive illumination, automatically adjusting IR and white light intensity in proportion to zoom and scene content. This feature ensures scene images are well-lit, but not bleached by over-exposure.

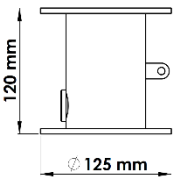
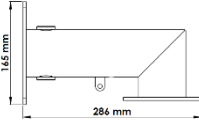
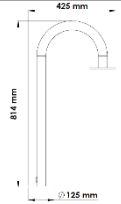
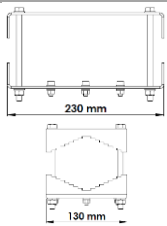
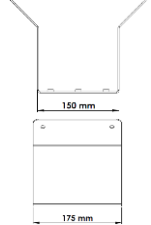
White light can be switched on as a visual deterrent to intruders.

Image	Part Code and Description
	RVX4-BS09-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, WIPER - Light Grey RVX4-POE-BS09-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, WIPER. High-PoE (802.3bt Midspan) 60W - Light Grey RVX4-ALM-BS09-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, WIPER - Light Grey
	RVX4-BS09-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, WIPER - Black RVX4-POE-BS09-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, WIPER. High-PoE (802.3bt Midspan) 60W - Black RVX4-ALM-BS09-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, WIPER - Black
	RVX4-BS09-IR-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, IR, WIPER - Light Grey RVX4-POE-BS09-IR-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, IR, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS09-IR-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR, WIPER - Light Grey
	RVX4-BS09-IR-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, IR, WIPER - Black RVX4-POE-BS09-IR-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, IR, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS09-IR-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR, WIPER - Black
	RVX4-BS09-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER - Light Grey RVX4-POE-BS09-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS09-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, Extra Long-Range IR up to 500m, WIPER - Light Grey
	RVX4-BS09-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER - Black RVX4-POE-BS09-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS09-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, Extra Long-Range IR up to 500m, WIPER - Black
	RVX4-BS09-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER - Light Grey RVX4-POE-BS09-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS09-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR/ White Light, WIPER - Light Grey
	RVX4-BS09-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER - Black RVX4-POE-BS09-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS09-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 9mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR/ White Light, WIPER - Black

Image	Part Code and Description
	RVX4-BS15-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, WIPER - Light Grey RVX4-POE-BS15-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, WIPER. High-PoE (802.3bt Midspan) 60W - Light Grey RVX4-ALM-BS15-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, WIPER - Light Grey
	RVX4-BS15-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, WIPER - Black RVX4-POE-BS15-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, WIPER. High-PoE (802.3bt Midspan) 60W - Black RVX4-ALM-BS15-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, WIPER - Black
	RVX4-BS15-IR-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, IR, WIPER - Light Grey RVX4-POE-BS15-IR-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, IR, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS15-IR-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR, WIPER - Light Grey
	RVX4-BS15-IR-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, IR, WIPER - Black RVX4-POE-BS15-IR-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, IR, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS15-IR-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR, WIPER - Black
	RVX4-BS15-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER - Light Grey RVX4-POE-BS15-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS15-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, Extra Long-Range IR up to 500m, WIPER - Light Grey
	RVX4-BS15-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER - Black RVX4-POE-BS15-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS15-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, Extra Long-Range IR up to 500m, WIPER - Black
	RVX4-BS15-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER - Light Grey RVX4-POE-BS15-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS15-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR/ White Light, WIPER - Light Grey
	RVX4-BS15-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER - Black RVX4-POE-BS15-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS15-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 15mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR/ White Light, WIPER - Black

Image	Part Code and Description
	RVX4-BS25-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, WIPER - Light Grey RVX4-POE-BS25-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, WIPER. High-PoE (802.3bt Midspan) 60W - Light Grey RVX4-ALM-BS25-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, WIPER - Light Grey
	RVX4-BS25-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, WIPER - Black RVX4-POE-BS25-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, WIPER. High-PoE (802.3bt Midspan) 60W - Black RVX4-ALM-BS25-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, WIPER - Black
	RVX4-BS25-IR-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, IR, WIPER - Light Grey RVX4-POE-BS25-IR-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, IR, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS25-IR-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR, WIPER - Light Grey
	RVX4-BS25-IR-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, IR, WIPER - Black RVX4-POE-BS25-IR-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, IR, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS25-IR-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR, WIPER - Black
	RVX4-BS25-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER - Light Grey RVX4-POE-BS25-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS25-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, Extra Long-Range IR up to 500m, WIPER - Light Grey
	RVX4-BS25-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER - Black RVX4-POE-BS25-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS25-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, Extra Long-Range IR up to 500m, WIPER - Black
	RVX4-BS25-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER - Light Grey RVX4-POE-BS25-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS25-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR/ White Light, WIPER - Light Grey
	RVX4-BS25-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER - Black RVX4-POE-BS25-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS25-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 25mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR/ White Light, WIPER - Black

Image	Part Code and Description
	RVX4-BS50-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, WIPER - Light Grey RVX4-POE-BS50-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, WIPER. High-PoE (802.3bt Midspan) 60W - Light Grey RVX4-ALM-BS50-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, WIPER - Light Grey
	RVX4-BS50-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, WIPER - Black RVX4-POE-BS50-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, WIPER. High-PoE (802.3bt Midspan) 60W - Black RVX4-ALM-BS50-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, WIPER - Black
	RVX4-BS50-IR-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, IR, WIPER - Light Grey RVX4-POE-BS50-IR-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, IR, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS50-IR-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR, WIPER - Light Grey
	RVX4-BS50-IR-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, IR, WIPER - Black RVX4-POE-BS50-IR-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, IR, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS50-IR-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR, WIPER - Black
	RVX4-BS50-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER - Light Grey RVX4-POE-BS50-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS50-IRX-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, Extra Long-Range IR up to 500m, WIPER - Light Grey
	RVX4-BS50-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER - Black RVX4-POE-BS50-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, Extra Long-Range IR up to 500m, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS50-IRX-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, Extra Long-Range IR up to 500m, WIPER - Black
	RVX4-BS50-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER - Light Grey RVX4-POE-BS50-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER. High-PoE (802.3bt Midspan) 90W - Light Grey RVX4-ALM-BS50-IRWL-G: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR/ White Light, WIPER - Light Grey
	RVX4-BS50-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER - Black RVX4-POE-BS50-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, IR/ White Light, WIPER. High-PoE (802.3bt Midspan) 90W - Black RVX4-ALM-BS50-IRWL-B: 40:1 4MP Visible Zoom, 640 x 512 50mm Fixed Lens Thermal Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR/ White Light, WIPER - Black

Image	Part Code and Description	Drawing
	RVX4-STANDOFF-G: 120 mm Standoff mount bracket - Light Grey RVX4-STANDOFF-B: 120 mm Standoff mount bracket - Black	 120 mm 125 mm
	RVX4-WALL-G: Wall mount bracket - Light Grey RVX4-WALL-B: Wall mount bracket - Black	 145 mm 286 mm
	RVX4-SWAN-G: Swan mount bracket - Light Grey RVX4-SWAN-B: Swan mount bracket - Black	 425 mm 814 mm 125 mm
	RVX4-POLE-G: Pole mount adaptor 60-90mm for Wall Bracket - Light Grey RVX4-POLE-B: Pole mount adaptor 60-90mm for Wall Bracket - Black	 230 mm 130 mm
	RVX4-CNR-G: Corner Mount adapter for Wall Bracket - Light Grey RVX4-CNR-B: Corner Mount adapter for Wall Bracket - Black	 150 mm 175 mm
	RVX4-BS-BIRD-SPIKE: Multiple Anti-Perch Bird Spike Attachment	
	RVX2-PSU: 24V DC PSU for X2/X3/X4 non alarm and alarm ball PTZ	
Other	RVX4-SD, RVX4-PC4, RV-POE-INJ-90W, RVX2-WASH	

Camera	Thermal	Visible
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays	1/1.8" STARVIS™ CMOS
Resolution	Sensor is 640×512. Image can be scaled up to 1920×1080	2688 (H)×1520 (V), 4MP
Pixel Pitch	12μm	
Spectral Range	8 to 14μm	
NETD	≤ 20mK	
Min. Illumination		Colour: 0.001 Lux @(F1.5, AGC ON), B/W: 0.0001 Lux (F1.5, AGC ON), 0 Lux with light
Shutter Speed		1/5 to 1/20,000s
Lens Type	Fixed lens	40x optical zoom
Focal Length	9, 15, 25, 50 mm	6.27 to 251 mm
Max. Aperture	F1.0	F1.5
Focus Control	Motorised focal	Auto/Manual/Semi-automatic
Field of View (FOV)	9 mm H: 48°, V: 38°; 15 mm H: 29°, V: 23°; 25 mm H: 17°, V: 14°; 50 mm H: 8°, V: 7°	H: 60.7° to 2.33°, V: 36.8° to 1.38°
IVS		
AI Multi-Target	Human / Vehicle / Ship detection	Human / Vehicle detection
Intelligent Analysis	Intrusion, Single Line Crossing, Double Line Crossing, Loitering, Wrong-Way Detection, Enter Area, Leave Area, Smart Motion Detection	Intrusion, Single Line Crossing, Double Line Crossing, Loitering, Wrong-Way Detection, Enter Area, Leave Area, Smart Motion Detection
	Support alarm triggering by specified target types (human and vehicle)	Support alarm triggering by specified target types (human and vehicle)
Smoke and Flame Detection		Supported
Smoker Detection	Supported	
Fire Spot Detection	Supported	
People Counting	Supported	Supported
Smart Tracking	Cold/hot spot tracking, human/vehicle/ship tracking	
Video and Audio		
Main Stream	1920×1080, 1280×1024, 1280×720, 640×512 @25fps	2688×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720 @25/30fps
Sub Stream	D1, VGA, 640×512, CIF @25fps	1280×720, D1, VGA @25/30fps
Bit Rate Control	CBR/VBR	CBR/VBR
Bit Rate	Main Stream: 100Kbps to 12Mbps, Sub Stream: 100Kbps to 6Mbps	Main Stream: 100Kbps to 16Mbps Sub Stream: 100Kbps to 6Mbps
Smart Encode	Supported	Supported
Audio Compression	G.711 A-law, G.711 μ-law, RAM PCM	G.711 A-law, G.711 μ-law, RAM PCM
Image		
Image Setting	Brightness, Contrast, Sharpness	Brightness, Saturation, Contrast, Sharpness
Mirror	Horizontal / Vertical / Horizontal+Vertical	Horizontal / Vertical / Horizontal+Vertical
Pseudo-color Setting	Up to 17 colours (White-hot / Black-hot / Rainbow / Iron red / HSV / Bone / Cool / Copper / Fire-hot / Pink / Spring / Summer / Autumn / Winter / Jet / Flame / Rose -Bengal)	
FFC Control	Auto / Manual	

Gain Control		Auto / Manual
White Balance		Auto / Tungsten / Fluorescent / Daylight / Shadow
Day/Night		Day mode / Night mode / Time
Noise Reduction	2D/3D DNR	2D/3D DNR
Image Enhancement		WDR, HLC, BLC, Anti-Shake (Digital Image Stabilisation)
Wide Dynamic Range		True WDR 120dB
OSD	Up to 8 OSD	Up to 8 OSD
Privacy Masking	Up to 4 areas	Up to 20 areas
Illuminator		IR Range: - Up to 500m
Thermal Function		
Temperature Range	-20°C to 150°C or 0°C to 550°C	
Accuracy	±8°C	
Temperature Detection	3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line).	
Temperature Display	Display in the lower left corner; follow the cursor display of the highest temperature, lowest temperature or average temperature	
Image Fusion	Fusion view of thermal view and overlaid details of the optical channel	
Event		
Alarm Triggers	IVS, Temperature anomaly, Motion detection, Alarm Input, Disk alarm, Network alarm, Abnormal sound detection	
Alarm Events	Alarm out, Audio alarm, Alarm record, SMTP, FTP upload	
PTZ		
Pan/Tilt Range	Pan: 360° continuous Tilt: 150° (Cantilever function gives 180° view range)	
Pan Speed	Pan: 0.1° to 50°/s, preset speed: 50°/s	
Tilt Speed	Tilt: 0.1° to 50°/s, preset speed: 50°/s	
Wiper	Tooled Silicone	
Preset Accuracy	≤ ±0.2°	
Presets	4	
Scan	12 scans	
Patrol	12 patrols, up to 32 presets per patrol	
Track	6 tracks	
3D Positioning	Supported	
Speed Setup	Auto/Manual (0-8)	
Power Off Memory	Supported	
Idle Motion	The time can be set (1-240 minutes), and functions such as preset positions, patrols, scans, and tracks can be run.	
Network		
Protocols	IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPOE, RTSP/RTP/RTCP, TCP/UDP, NTP, ARP, UPnP, FTP, SMTP, QoS, 802.1x, SNMP, Multicast	
Compatible Integration	ONVIF (Profile T/G/M), CGI, SDK	
User/Host Level	Up to 10 users, 3 levels: Administrator, Operator, Media user	
Security	IP address filter, encrypted HTTPS, Illegal login lock, IEEE 802.1x	
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge	
Web Language	English, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian. Default: English	

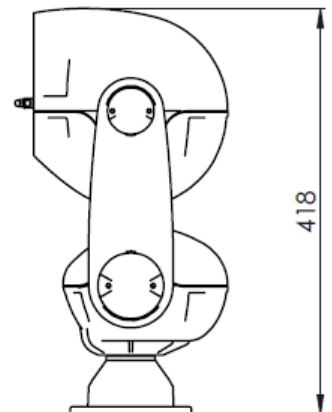
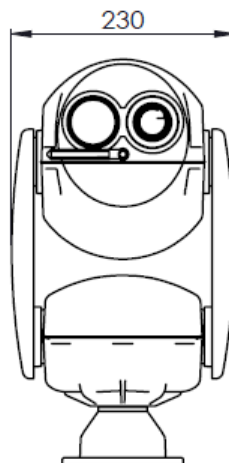
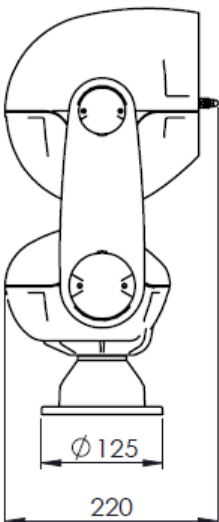
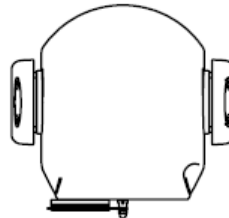
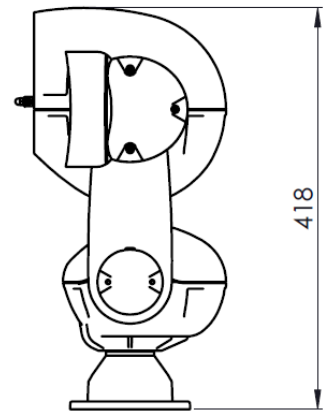
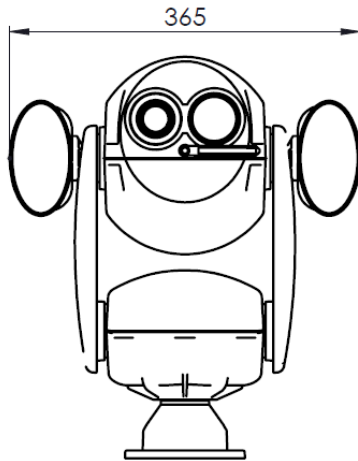
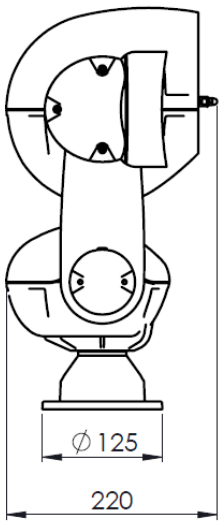
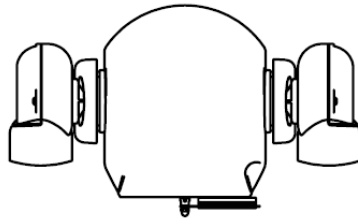
Interface	
Network Interface	1 Ethernet (10/100 Base-T) RJ-45 Connector
Alarm Interface	4ch Alarm In, 2ch Alarm Out
SD Card Slot	Built-in, up to 1TB – must be specified on order.

Electrical & Physical	
Power Supply	24VDC via RVX2 PSU module; input 100~240VAC 50/60Hz. PoE Version: RJ45 socket, takes power & data (90W)
Power Consumption	Max 70 W
Operating Temperature and Humidity	-40°C to 70°C (Light colours only, Black 50°C) Less than 90% RH
Ingress Protection	IP68
Camera body	Marine finish as standard, Aluminium, die-cast alloy, with pre-coat, powder-coated finish
Colour	RAL 7035 Light-Grey or RAL 9005 Black. Custom RAL made to order.
Dimensions	Non-LED models: H 418mm W 230mm D 220mm, LED models: H 418mm W 365mm D 220mm
Net Weight	11 kg (without lamps), 13kg (with lamps)
Environmental and EMC	See “Technical Standards” page at end of document

DRI Distance Table				
Focal Length	9 mm	15mm	25mm	50mm
Detection Distance (Human: 1.8×0.5m)	375 m	625 m	1,042 m	2,083 m
Detection Distance (Vehicle: 4×1.5m)	1,150 m	1,917 m	3,194 m	6,389 m
Recognition Distance (Human: 1.8×0.5m)	94 m	156 m	260 m	521 m
Recognition Distance (Vehicle: 4×1.5m)	288 m	479 m	799 m	1,597 m
Identification Distance (Humans: 1.8×0.5m)	47 m	78 m	130 m	260 m
Identification Range (Vehicles: 4×1.5m)	144 m	240 m	399 m	799 m

Detection Range Table – reference only, distances are subject to real life conditions (e.g. atmospheric conditions, target size, installation site etc.)				
Focal Length	9 mm	15mm	25mm	50mm
VCA Detection Distance (Human: 1.8 × 0.5 m)	40 m	65 m	101 m	235 m
VCA Detection Distance (Front/Rear of Vehicle: 4×1.5 m)	75 m	130 m	230 m	400 m
Temperature Measurement (Object: 1 × 1m)	150 m	250 m	417 m	833 m
Temperature Measurement (Object: 0.2 × 0.2m)	30 m	50 m	83 m	167 m
Fire Detection (Object: 1 × 1m)	375 m	625 m	1,042 m	2,083 m
Fire Detection (Object: 0.2 × 0.2m)	75 m	125 m	208 m	417 m

DORI Distance	
Lens	6.27 to 251 mm
DORI Distance - Detection	95 to 3,515 m
DORI Distance - Observe	38 to 1,406 m
DORI Distance - Recognize	19 to 703 m
DORI Distance - Identify	9.5 to 351.5 m



Environmental	
Cold Test	EN 60068-2-1:2007 Test Ae -40°C
Dry Heat Test	EN 60068-2-2:2007 Test Be +70°C
Damp Heat Test, Cyclic Test	EN 60068-2-30:2005 Test Db
Vibration Test	EN 50556:2018 Section 6.3.2 & Table 4 Class AL & Section 6.3.1.5 & EN 60068-2-64:2008 Test Fh
IPX8	IEC 60529:1989+A1:1999+A2:2013+COR1:2019
IP6X	IEC 60529:1989+A1:1999+A2:2013+COR1:2019
Salt Spray	BS EN ISO 9227:2022 1000 Hours Salt Spray

EMC Emission	
Conducted Emissions at Mains Power Port (150kHz-30MHz)	EN 55032:2015+A11:2020+A1:2020
Asymmetric Mode Conducted Emissions (150kHz-30MHz)	EN 55032:2015+A11:2020+A1:2020
Radiated Emissions (30MHz – 1GHz)	EN 55032:2015+A11:2020+A1:2020
Radiated Emissions (Above 1Ghz)	EN 55032:2015+A11:2020+A1:2020
Harmonic Current Emission	EN IEC 61000-3-2:2019+A1:2021
Voltage Fluctuations and Flicker	EN 61000-3-3:2013+A1:2019+A2:2021

EMC Immunity	
Electrostatic Discharge	EN 55035:2017+A11:2020 & EN 50130-4:2011+A1:2014
Radiated Immunity (80MHz-1GHz, 1800MHz, 2600MHz, 3500MHz, 5000Mhz)	EN 55035:2017+A11:2020
Radiated Immunity (80MHz-2.7GHz)	EN 50130-4:2011+A1:2014
Electrical Fast Transients & Burst at AC Power Port	EN 55035:2017+A11:2020 & EN 50130-4:2011+A1:2014
Electrical Fast Transients & Bursts at Signal Port	EN 55035:2017+A11:2020 & EN 50130-4:2011+A1:2014
Surge at AC Power Port	EN 55035:2017+A11:2020 & EN 50130-4:2011+A1:2014
Surge at Signal Port	EN 55035:2017+A11:2020 & EN 50130-4:2011+A1:2014
Conducted Immunity at AC Power Port (150kHz-80MHz)	EN 55035:2017+A11:2020 & EN 50130-4:2011+A1:2014
Conducted Immunity at Signal Port (150kHz-80MHz)	EN 55035:2017+A11:2020 & EN 50130-4:2011+A1:2014
Voltage Dips and Interruptions	EN 55035:2017+A11:2020 & EN 50130-4:2011+A1:2014
Mains Supply Voltage Variations	EN 50130-4:2011+A1:2014