Key Features

- **Ultra-tough, Electropolished 316 Stainless Steel rugged PTZ camera**
- **PoE 90W (802.3bt Midspan) Version available**
- **Adaptive White Light and IR (zoom-linked) operation**

- **VMS Integration, including Redvision VMS1000™**
- **Rugged Mounting Bracket Options**
- **Brushless Stepper Motors for Resilience and durability**
- **ONVIF Compliant**
- **SD Card recording option, up to 256GB.**

ONVIF™ Member

X3 STORM™ rugged ball PTZ

The X3-STORM™ rugged, 4 Megapixel PTZ camera is designed for extreme environment surveillance applications. The camera body is precision-manufactured from Electropolished 316 Stainless-Steel, with toughened, optically flat glass (polycarbonate option available), making it highly resistant to vandalism and demanding environmental conditions. It has a long-life silicone wiper as standard and high-efficiency, adaptive, long-range white-light and IR LED illumination as options, for exceptional night-time and lowlight operation.

Everything about the X3-STORM™ rugged, ball PTZ is of high quality. All moving parts are designed to last; from its long-life, silicone wiper through to the motor technology used in its pan and tilt mechanism and its 30x optical zoom camera module, with exceptional low-light performance. The camera is perfectly balanced, minimising component wear and giving a mean time before failure (MTBF) rating of 7 years.

Ultimate resilience

The X3-STORM™ is designed for the ultimate in resilient, rugged surveillance camera applications, such as Coastal, Heavy Industrial, Tunnels, Highways, Mining and Petrochemical environments. All exterior components are made from 316 grade Stainless Steel, resulting in excellent corrosion resistance when exposed to the elements.

The unique manufacture of the X3-STORM™ uses an investment casting process, with critical tolerance machining to ensure incredible precision with minimal material wastage.

Simple install, maintenance free

The X3-STORM™ is designed for easy installation and configuration. A complete range of brackets, mounts and cable extensions allow upright or hanging installation in any environment.

The X3-STORM™ 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 electropolished 316 Stainless Steel.

The X3-STORM™ 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 the VMS1000™, or by pre-set.

Extensive features

The X3-STORM™ has an extensive range of features including four video streams for recording, visualisation, set-up and servicing; H265, H264 and MJPEG compression; optional 256GB maximum SD card-based edge storage; ONVIF compliance to Profile S and G; 400 pre-sets, 12 tours, 12 scans, 6 tracks and 20 privacy masks; alarms, motion detection, intelligent analytics; and its operating temperature range is -40°C to 70°C. A 90W PoE version (802.3bt Midspan) offers quick and easy connectivity via RJ45 socket, operating over a full 100m Cat 5e span.

Night-time performance

The Redvision X3-STORM™ rugged, ball PTZ cameras have infra-red (IR) and white light illumination options, using long-life, super-efficient LEDs. DORI (Detection, Observation, Recognition and Identification) tests show that the X3-STORM™ performs up to 300m.

The X3-STORM™ 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
	RVX3S: 30:1 4MP, 316 Stainless Steel Zoom Ball PTZ, WIPER **RVX3S-POE:** 30:1 4MP, 316 Stainless Steel Zoom Ball PTZ, WIPER. High-PoE (802.3bt Midspan) 60W **RVX3S-ALM:** 30:1 4MP, 316 Stainless Steel Zoom Ball PTZ, 4 alarm inputs, 2 alarm outputs, WIPER
	RVX3S-IR: 30:1 4MP, 316 Stainless Steel Zoom Ball PTZ, IR, WIPER **RVX3S-POE-IR:** 30:1 4MP, 316 Stainless Steel Zoom Ball PTZ, IR, WIPER. High-PoE (802.3bt Midspan) 90W **RVX3S-ALM-IR:** 30:1 4MP, 316 Stainless Steel Zoom Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR, WIPER
	RVX3S-IRWL: 30:1 4MP, 316 Stainless Steel Zoom Ball PTZ, IR/ White Light, WIPER **RVX3S-POE-IRWL:** 30:1 4MP, 316 Stainless Steel Zoom Ball PTZ, IR/ White Light, WIPER. High-PoE (802.3bt Midspan) 90W **RVX3S-ALM-IRWL:** 30:1 4MP, 316 Stainless Steel Zoom Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR/ White Light, WIPER

Image	Part Code and Description	Drawing
	RVX3-STANDOFF: 120 mm Standoff mount bracket	120 mm, ⌀ 125 mm
	RVX3-WALL: Wall mount bracket	165 mm, 286 mm
	RVX3-VISOR: Sun & rain Visor (only applies when camera is mounted in upright position)	394 mm, 226 mm
	RVX2-WASH: Washer nozzle kit – compatible with standard CCTV wash pumps	
	RVX2-PSU: 24V DC PSU for X2/X3/X4 non alarm and alarm ball PTZ	
	RV-POE-INJ-90W: 90W Single Port Multi-Gig Power over Ethernet Midspan IEEE 802.3bt Compliant Power Injector	
Other	**RVX3-SD, RVX3-PC4**	

Camera

Image Sensor	1/2.8" Progressive Scan CMOS
Effective Pixels	2592(H)×1520(V)
Electronic Shutter	Auto/Manual, 1/5 ~ 1/20,000s
Min. illumination	Color: 0.01 Lux @ (F1.6, AGC ON) B/W: 0.001 Lux, 0 Lux (IR LED ON)
S/N Ratio	55 dB
Day/Night	Auto(ICR)/Day / Night/Timing
Wide Dynamic Range	True WDR
IR On/Off Control	Auto/Manual

Lens

Focal Length	5.3 ~ 159mm
Max. Aperture	F1.6 ~ F4.3
Angle of View	H: 55° ~ 2.3°, H: 41.6° ~ 1.7°
Optical Zoom	30x
Digital Zoom	16x
Focus Control	Auto/Manual

PTZ

Pan/Tilt Range	Pan: 360° continuous Tilt: 150°
Manual Control Speed	Pan: 0.1° ~ 50°/s, Tilt: 0.1° ~ 50°/s
Preset Speed	Pan: 50°/s, Tilt: 50°/s
Presets	400
PTZ Mode	6 Track, 12 Scan, 12 Tour (up to 32 presets per tour)
3D Positioning	Supported
Power-Off Memory	Supported
PTZ Status Display	Supported
Idle Motion	Activate Preset/ Scan/ Tour/ Track if there is no command in the specified period

Video

Encoding	H.264 / H.265 / MJPEG / Smart Encode
Max. Resolution	4MP (2592×1520)
Streaming Capability	3 Streams
Stream/Frame Rate	Stream1: 2592×1520, 2560×1440, 2304×1296, , 1920×1080, 1280×720 @ 25/30fps Stream2: D1, VGA, 640×360, CIF, QVGA @ 25/30fps Stream3: VGA, CIF, QVGA @ 25/30fps
Bit Rate Control	CBR/VBR
Bit Rate	Stream1: 200kbps~12Mbps Stream2: 10kbps~3Mbps Stream3: 10kbps~1.5Mbps
Image Setting	HLC / BLC / Defog / WDR / Anti-shake / Brightness / Saturation / Sharpness / Contrast / Exposure Control / Scene
Noise Reduction	2D/3D DNR
Region of Interest	Off/On (8 Zone, Rectangle)
Privacy Masking	Supported

Network

Protocols	IPv4/IPv6, 802.1x, HTTP, HTTPS, TCP/IP, UDP/IP, RTSP, DHCP, NTP, RTCP/RTP, PPPoE, SMTP, DNS, UPnP, FTP, ARP, SNMP, TLS/SSL, IGMP, DNS, DDNS, ICMP, QOS
Interoperability	ONVIF (Profile S, Profile G, Profile T), SDK, CGI
Streaming Method	Unicast
Max. User Access	10 Users
Edge Storage	Built-in Micro SD slot, up to 256G
Web Viewer	Microsoft Windows: ≤IE11, Chrome, Firefox, Microsoft Edge MacOS: Chrome, Firefox

Intelligence & Alarm

Auto Tracking	Supported
Alarm	Motion alarm, Disk alarm, Day/Night switch alarm, Network alarm, Audio abnormal alarm, Alarm push

Electrical and Physical

Power Supply	24VDC via RVX2 PSU module; input 100~240VAC 50/60Hz. PoE Version: RJ45 socket, takes power & data (90W)
Power Consumption	24VDC: 50W. PoE: 802.3BT Midspan 90W (LED models)
Dimensions	Non-Lamp models: 386 x 211 x 214mm Lamp models: 386 x 313 x 214mm
Weight	14kg without lamps, 18kg with lamps
Operating Temperature	-40°C ~ +70°C
Impact Rating	Meets IK10 standards (with Polycarbonate window fitted)
Corrosion Testing	ASTM B117 1000 hour Salt-Spray Test
Ingress Protection	Meets IP68 standards, NEMA 4x requirements
Vibration Testing	TEN 50556:2011, clauses 6.3.2 & 11 (Table 3, Class AL2) EN 60068-2-64-2008 Test Fh
EMC	BS EN 55032:2015+A11:2020, Class A BS EN 50130-4:2011+A1:2014
Camera Body	316 Stainless-Steel
Colour	Electropolished Stainless Finish. Custom RAL made to order.

Lighting & DORI

Illumination Range	IR (850nm) to 300m White Light to 250m	
DORI Category	Distance covered	
Detection	IR Light: 300m	White Light: 250m
Observation	IR Light: 250m	White Light: 200m
Recognition	IR Light: 150m	White Light: 150m
Identify	IR Light: 75m	White Light: 75m